

Abstracts - USICON 2015

CKP MENON BEST PAPER PRIZE SESSION PAPERS

CKP 01

Evaluation of magnetic resonance imaging (MRI) - transrectal ultrasound (TRUS) fusion biopsy in detection of prostate cancer in indian patients - a pilot study

Somendra Bansal

Medanta Kidney and Urology Institute, Gurgaon

Introduction: Transrectal rectal ultrasound guided biopsy is the standard to diagnose carcinoma prostate. Magnetic resonance imaging (MRI)-transrectal ultrasound (TRUS) fusion systems have been developed to fuse previously acquired MRI data with real-time TRUS image. By using multiparametric MRI, Prostate Imaging Reporting and Data System (PI-RADS) score predicts the probability of cancer risk and its aggression. **Methods:** In this prospective, pilot study, we included 24 patients for suspicious of prostate cancer (ie, PSA >4 ng/ml and/or abnormality on digital rectal examination). All patients were first undergone 3.0 T multiparametric MRI and a PI-RADS score given to each suspicious lesion. Then targeted MRI-TRUS fusion biopsy on suspicious lesions and standard 12 core biopsy were performed. **Results:** Median age was 63.5 years and median PSA was 9.8 ng/ml. Targeted biopsies detected more cancer cores (37.3% of 126 targeted cores) compare to standard 12- core biopsies (15.32% of 274 cores) (z value=4.9 and p<0.0001). Prostate cancer detected in 0%, 21%, 66% and 83% of suspicious lesions of PI-RADS score 2, 3, 4 and 5 respectively (chi-square test=36.429, p=0.000). **Conclusions:** MRI-TRUS fusion biopsy detected more cancerous core than standard 12-core biopsy. There is statistically significant association between PI-RADS scoring of suspicious lesions on MRI and prostate cancer detection. Further large studies are needed to confirm the utility of MRI-TRUS fusion biopsy in detection of prostate cancer. **Key- words:** MRI-ultrasound fusion, prostate cancer, biopsy

CKP 02

Can radioisotope renal scintigraphy replace Intravenous Pyelography as a modality of choice in obstructive calculi?

Mandrekar PTN, Gaude V, Gomes K, Lawande PR, Prabhudessai MR, Punjani HM

Goa Medical College

INTRODUCTION AND OBJECTIVES: Radio-isotope renal scintigraphy is a sensitive investigation to changes that induce focal or global changes in kidney function. The aim was to study the utility of renal scintigraphy as an investigation of choice in obstructive calculi. **MATERIALS AND METHODS:** This is a retrospective study of 110 patients of obstructive calculi who presented to Goa Medical College from June 2013 to June 2014. Data was analysed for mode of presentation, site of calculus and renal function. Utility of renal scan as an investigation of choice with regards to renal function and complications was analysed. **RESULTS:** Of 110 patients, 90 underwent DTPA scan. Remaining had estimation of renal plasma flow through EC scan. 43 patients had serum creatinine <1.5 mg/dl while 67 had serum creatinine >1.5mg/dl. 84.5% patients were found to have stage 2 and 3 of chronic kidney disease (CKD). Only 7/43 patients with serum creatinine < 1.5mg/dl were found to have normal GFR. None of the patients underwent IVP. 56% of patients had ureteric stones while 44% patients had renal pelvic calculus. 23 patients had bilateral calculi. **CONCLUSION:** Renal scan in conjunction with either sonographic KUB, CT KUB or retrograde pyelogram is an excellent modality in the management of obstructive calculi and avoids intravenous contrast. Renal scintigraphy does not damage the

kidney, has no lingering toxicity, results in minimal absorbed radiation, and is free from allergic reactions. Further studies are however required to validate its use as a first choice investigation for functional assessment in obstructive calculi.

CKP 03

Comparison of tadalafil and tamsulosin in medical expulsive therapy for ureteric calculus: prospective, randomized, placebo controlled study

Laddha Abhishek, Mishra Shashikant, Ganpule Arvind, Sabnis Ravindra, Desai Mahesh

Muljibhai Patel Urological hospital, Nadiad

Introduction and objectives: Ureteric calculi usually present as acute episode of ureteral colic. Primary aim of our study was to compare the stone expulsion rate for tadalafil and tamsulosin. We also compared time to stone expulsion, need for analgesic requirement and side effect associated with these drugs. **Methods:** 150 patients presenting with single lower ureteral stone (juxtavesical ureteral lithiasis at lower 5 cm of the ureter), 4 to ≤ 10 mm in size were randomized in three groups. Patients in group one received placebo and served as control, group two received phosphodiesterase 5 inhibitor (tadalafil 10mg OD) and group 3 received alpha one blockers (tamsulosin 0.4 mg OD) for accelerating the passage of stone. **Results:** The stone expulsion rate was 58% (36 of 50 patients) for placebo group, 80 % (40 of 50 patients) for tadalafil group and 74 % for the tamsulosin group (37 of 50 patients). Tadalafil was superior to placebo in terms of stone expulsion rate (p value: 0.017) but comparable to tamsulosin (p : 0.139). Patients in tadalafil group had significant less pain scores at 1 and 2 week follow up in comparison to other two groups. Mean analgesic requirement for placebo, tadalafil and tamsulosin was 331, 132.93 and 277.08 mg of diclofenac respectively. **Conclusion:** Tadalafil has better stone expulsion rate and faster stone expulsion as compared to tamsulosin but difference is not statistically significant. Tadalafil results in statistically significant improvement in pain scores and decreased requirement of analgesic as compared to other two groups.

CKP 04

Carbonic anhydrase ix expression profile in solid renal lesions and as a molecular marker in differentiating complex cystic renal lesions

Himesh Gandhi, Thomas A, Balagopal Nair T, Lakshmanan V*, Sanjeevan KV, Pooleri GK

Amrita Institute of Medical Sciences, Kochi

Introduction and objectives CAIX is strongly expressed in the solid renal clear cell carcinoma. This expression characteristic can be used to differentiate type III renal cysts and guide decision regarding further treatment strategies. **Methods** Patients with solid/complex cystic renal tumours were included in this study. Histopathological diagnosis was obtained for operated cases. Tumour tissue, normal renal tissue and aspirate from the cyst was sent for Western Blot (WB) and Immunohistochemical (IHC) staining and CAIX expression profile was assessed and correlated with tumour characteristics. McNemar Chi-square test was used for analysis between cysts expression. **Results** Total 31 patients included in the study. Twenty one patients underwent surgery. Ten patients with Bosniak I simple cysts were included and their aspirates were sent for WB analysis to act as a control. Diagnostic accuracy of CAIX with WB analysis was 90.32% with a positive predictive value of 94.44%. Normal renal parenchyma and simple cysts aspirate did not showed CAIX expression. **Conclusions** CAIX is strongly expressed in all solid and cystic renal malignancy especially CCRCC (100% and 92% resp.). Small volume fluid aspirate from atypical

complex cysts can be subjected to WB and till the diagnostic accuracy is maintained with high positive predictive value. Atypical cysts aspirate with CAIX expression carries high chance of malignancy and required definitive treatment.

CKP 05

Percutaneous tibial nerve stimulation in paediatric overactive bladder: A prospective study

Patidar Nitesh, Mittal Varun, Arora Sohrab, Kumar Manoj, Ansari M S

SGPGIMS, Lucknow

Background: We evaluated the effectiveness of percutaneous tibial nerve stimulation to treat overactive bladder in children. We designed a prospective randomized trial with sham control for this evaluation. **Materials and Methods:** We prospectively randomized 40 patients with mean age 7.71 years (±2.217 SD) in test group and 8.38 years (±2.277 SD) in sham group. A total of 12 sessions, 30 minutes each (20 Hz) were performed weekly. The criteria used to evaluate the rate of success were 1) self-reported non-response, partial response, response and full response 2) maximum voided volume, average voided volume and number of voids daily based on bladder diary entries. After completion of the 12 sessions controls who were not cured underwent active treatment. **Results:** A total of 21 patients in the test group and 16 in the sham group underwent treatment. Among the active treatment group 66.6% of parents reported full response. In the sham group no parent reported full response ($p=0.001$). In the test group average and maximum voided volumes showed a statistically significant increase and the number of voids daily decreased. Patients from the sham group who did not have improvement of symptoms continued with 12 more sessions of PTNS and the sham group became part of the test group. After PTNS these patients showed statistically significant improvement. **Conclusions:** PTNS is effective in the treatment of children with non neurogenic refractory overactive bladder. In view of its effectiveness and acceptability we believe that PTNS should be part of the paediatric urology armamentarium when treating functional incontinence.

CKP 06

Prediction of Outcome of Conservative Management of Antenatally Detected Hydronephrosis Due to Uretero-Pelvic Junction Obstruction; Single Centre Prospective Multivariate Analysis

Sohrab Arora

SGPGIMS Lucknow

Introduction We present our experience with management of ANH due to UPJO and try to find a way to predict which patients will eventually need surgery before deterioration of renal function. **Material and methods** Prospective single surgeon single centre study over 10 years involving 122 renal units. Patients who qualified for conservative management were followed using a standard protocol. Patients who had surgery were compared with the nonoperated group in univariate analysis with χ^2 test and student-t test. Survival analysis was done using Kaplan-meyer and log rank test and multivariate analysis using Cox proportional hazards model. **Results** Of the 109 renal units qualified for conservative management, 42.2% had SFU grade 4 hydronephrosis. Mean anteroposterior diameter (APD) and mean cortical thickness (CT) on first ultrasound were 18.62±8.63 and 7.53±3.25 mm respectively. 23.9% patients underwent surgery with median time to failure of 37 weeks. Univariate analysis revealed that SFU grade, APD, CT, and preoperative differential renal function had significant association with surgery ($p < 0.05$). Multivariate analysis revealed APD and preoperative differential renal function as the only independent predictors for need of surgery with an adjusted hazard ratio of 1.103 and 0.925 respectively. Receiver operating curve analysis showed that APD of 24.3mm can predict the need for surgery with a sensitivity of 73.1% and a specificity of 88%. **Conclusions** We stop short of recommending surgery only on the basis of APD. Instead, we recommend that efforts be made to improve the specificity of this criterion, or by using APD in perspective with the differential renal function to reduce the burden of investigations in those with APD <24 mm

CKP 07

Prospective evaluation of quantitative & qualitative renal parenchyma following nephron sparing surgery

Gautam Ram Choudhary, Mandal AK, Singh SK, Lal A, Mete UK, Kumar S, Mavuduru R

PGIMER Chandigarh

INTRODUCTION During the last 10 years partial nephrectomy (PN) has emerged as the gold standard for the treatment of small renal masses with equivalent oncological outcomes, better preservation of renal function and improved overall survival compared with radical nephrectomy. Loss of renal function following NSS is multifactorial and impact of individual factor for the final functional outcome is still a gray zone and has not been well studied. The present prospective study was plan to evaluate the impact of various factors responsible for quantitative and functional outcome of NSS. **MATERIALS ANDMETHODS** Fifty two patients of localized renal mass maximum diameter up to 7 cm size, underwent NSS from July 2012 to May 2014 studied prospectively. A triphasic contrast enhanced computed tomography (CECT) of abdomen was performed for characterization of tumor. Glomerular filtration rate (GFR) was calculated using Tc99m diethylene triamine pentaacetic acid (DTPA) scan and Cockcroft-Gault (CG) formula. All standard protocol of lap/open NSS were followed. All relevant intra and peri operative events were noted. Follow up serum creatinine, CECT abdomen and DTPA scan were performed at 3 month. We analyzed Various factors affecting quantity and qualities of renal parenchyma. **RESULTS** Fifty two patients analyzed , mean duration of warm ischemia was 31.47 minutes(15-50) , it was > 30 min in 14 patients and ≤30 min in 20 patients. Mean renal parenchymal volume loss of tumor bearing kidney was 14.74cc ($p=0.001$). Percent split GFR of tumor bearing kidney reduced significantly at follow up from 51.36% to 31.8% whereas percent split GFR of opposite renal moiety increased from 48.4% to 52.44%. When warm and cold ischemia group was compared, change in renal parenchymal volume, total GFR by CG and DTPA, split GFR of tumor bearing moiety was not differ. Gender, duration of ischemia and percentage of exophytic component of tumor were independent variable to affect renal parenchymal volume ($r=.491, p=.004$). Similarly approach(open/lap) of surgery was independent variable for percent decrease in split renal function of tumor bearing kidney ($r=.302, p=.04$). Size, stage, polar location of tumor, duration of surgery, preoperative CKD and need of blood transfusion did not affect change in renal volume and function in follow up period. **CONCLUSION** Volume loss after NSS occurs partly as the result of excision of normal tissue adjacent to the tumor margin but also to a large extent to collateral damage sustained during renorrhaphy, namely ligation of adjacent arteries, tissue compression and necrosis at the renorrhaphy site as well as pyramidal atrophy due to calyceal ligation. The use of intraoperative ultrasonography and judicious 3-dimensional planning before and during intra-renal dissection may optimize the amount of preserved parenchyma, while still achieving negative surgical margins. The ischemia time management is further important for patients with compromised renal function or solitary kidney.

CKP 08

Post-operative acute kidney injury in donor nephrectomy using RIFLE criteria and its associated risk factors

Bhatt Manish, Srinivas J, Nagabhusan M, Keshavamurthy M

Institute of Nephrourology, Bangalore

Introduction There is little published information on AKI after donor nephrectomy. Recent studies have shown that AKI increases the risk of CKD and end-stage renal disease. The underlying mechanism by which AKI causes progressive CKD is not completely understood. **Materials and methods** Between 2007 and 2013, patients who underwent donor nephrectomy were analyzed in this study. Preoperative characteristics including were recorded. The main predictor was the occurrence of post-operative AKI, which was defined according to the risk, injury, failure, loss and end-stage kidney disease (RIFLE) criteria. We did not consider the urine output criteria. To assess the occurrence of AKI, the highest serum creatinine level within 7 days of the nephrectomy was compared with the preoperative serum creatinine level. **Results** Sixty nine (84.1%) patients experienced post-operative AKI(51 in AKI risk category, 18 in injury category and none AKI failure category). There was no difference

in open versus laparoscopic approach for development of AKI following donor nephrectomy. Overall AKI was almost same in all age groups, gender and GFR but severity of AKI increases with age, with male and with increase GFR. Conclusion This study showed that 84.15% of patients who underwent donor nephrectomy experienced post-operative AKI. Older age, male sex, high preoperative GFR was associated with more severe form of AKI. In the era of minimally invasive surgery and day care surgery, these groups needs to monitor more carefully to maintain hemodynamic stability and not to increase chances of acute kidney injury.

CKP 09

An indian prospective study of docetaxel therapy in CRPC: can pretreatment factors predict the response

Kaushal Devashish, Sood Rajeev, Khattar Nikhil, Nayyar Rishi

PGIMER & Dr Ram Manohar Lohia Hospital New Delhi

Introduction Studies on the effects of chemotherapy in Indian Castration Resistant Prostate Cancer (CRPC) patients are very limited and world data is inconsistent. The purpose of present study is to assess effects of Docetaxel therapy in CRPC in Indian patients in terms of survival benefit, both progression free survival and overall survival. This study also analyzes the effects of various factors on survival of CRPC patients. **Methodology** This is a single institutional prospective observational study. CRPC patients were treated with Docetaxel and followed till death as the primary end point or till the end of study. Survivals were calculated with Kaplan Meier method. Factors affecting survival were analysed with univariate and multivariate analysis by log rank t test and Cox proportion hazard regression analysis. **Result** Out of enrolled 101 patients 78 were treated with Docetaxel. Decline in PSA (>50% reduction) was observed in 61.54%. Radiological response of regression noted in 40 % Nuclear Bone Scan and 19.23% CT/MRI by RECIST criteria. Progression free survival and overall survival with Docetaxel (n=78) were 11.8 and 21 months respectively. Hemoglobin less than 11 gm%, Alkaline phosphatase more than 115 IU/dl, PSA more than 14 ng/ml, Gleason score more than 7 and duration from diagnosis of carcinoma prostate to CRPC less than 24 months, number of chemotherapy cycles less than 6 were all found to be significantly associated with poor overall survival in univariate analysis while only Hemoglobin (P=0.0159) showed independent association with overall survival in multivariate analysis. **Conclusion** Overall and progression free survival of CRPC patients with Docetaxel is 21 & 11.8 months respectively. Hemoglobin, Alkaline phosphatase, PSA, Gleason score, Docetaxel cycle and duration from diagnosis of carcinoma prostate to CRPC were found to be significantly associated with poor overall survival.

CKP 10

Study of erectile function in patients of pelvic fracture urethral distraction defect before and after treatment

Navneet Kumar, Mavuduru RS, Mohanty PK, Bhogeshia S, Mandal AK, Singh SK

PGIMER, Chandigarh

INTRODUCTION: Present study was conducted to evaluate the erectile function in patients of PFUDD and the effect of surgery, length of distraction & stage of urethroplasty on erectile dysfunction. **METHODS:** Between January 2010 to July 2013, ninety one patients with PFUDD, were included prospectively. EF was evaluated by IIEF-5 questionnaires before and 3 months post surgery. Urethral distraction was measured by retrograde urethrogram and micraturating cysto-urethrogram. Stage of progression during urethroplasty was noted. Patients were followed for 3 months. **RESULTS:** Seventy six patients completed the follow-up. There was no significant difference in mean IIEF-5 scores of all patients after urethroplasty (P=0.607). Twenty six patients had normal EF before surgery, 17(65.38%) of these developed ED after urethroplasty however majority were mild category. Of, those with mild ED about 40% became normal after surgery. However, those with severe and moderate ED had hardly any change with urethroplasty. The change in mean IIEF-5 scores, after urethroplasty was not significantly different with respect to length of urethral distraction. (urethral distraction upto 2cm; p=0.235, 2.1-4.0cm; p=0.075 and 4.1-6.0; p=0.344) and with regards to the stage of urethroplasty (p=0.070). The success rate was 84%. There was no correlation with the presence or absence of ED, length of distraction

or stage of progression for urethroplasty with respect to the surgical failure. **CONCLUSIONS:** PFUDD is associated with higher chance of ED. Subsequent urethroplasty has no significant effect on EF. Factors such as urethral distraction, length and stage of urethroplasty are not specifically related to post urethroplasty ED.

BRIJ KISHORE PATNA PRIZE PAPERS

BKP 01

Failure of initial angiographic management for post renal intervention severe bleeding: Predict and Save the kidney

Sureka Sanjoy Kumar

SGPGIMS, Lucknow

Introduction Failure of Digital subtraction angiography (DSA) and super-selective angiography (SSA) to control severe bleeding following renal interventions may be life threatening and often require nephrectomy. We have evaluated the factors predicting the risk for initial failed angiographic management in this situation formulated a guideline for their management. **Materials and Methods** We have retrospectively evaluated the prospectively collected data of 144 patients who underwent DSA and or SSA at our centre during January 2006 to June 2014 for severe bleeding complications following various renal interventions. 19 patients (Group A) with initial failed angiographic management were compared to patients with initial success (n=125, Group B). Chi-square univariate and logistic regression multivariate analysis were used for statistical analysis. **Results** In 19 patients (13.1%) either initial angiography failed to detect bleeding site (n=4) or initial SSA was failed (n=15). Subsequently 14 & 4 patients required second & third session of DSA & SSA and one had nephrectomy. On univariate analysis low haemoglobin (p=0.025), multiple tract (n>1) during PCNL (p=0.01), multiple bleeding site (>1=0.01 and >2=0.001) and patients with evidence of intrarenal vasoconstriction on DSA (p=0.008) were found to predict risk for failure. But on multivariate analysis multiple bleeding site >2 (p=0.003, CI-95%=5.23{1.3-22.5}) and intra-renal vasoconstriction (p=0.02, CI-95%=2.56{2.15-4.75}) were found to independently predict the failure. **Conclusions** Patients with multiple bleeding lesions and who are on inotropic support or evidence of intra-renal vasoconstriction are at high risk for failure of initial DSA and SSA. Most of them can be successfully managed by subsequent session DSA

BKP 02

Demographic and perioperative data of consecutive 512 cases of robotic assisted radical prostatectomy

Anandan Murugesan, Narmada Gupta, Gagan Gautam, Rajiv Yadav, Manav Suryavanshi, Rajesh Ahlawat

Medanta Medicity, Gurgaon

Introduction: Prostate cancer is increasingly diagnosed in early stages in India in recent times. Robot assisted radical prostatectomy is the standard of care for localized cancer if facilities are available. Though large volume data is available in western literature regarding the demographic characters of the patients undergoing RARP, they are lacking in India. **Aim:** To evaluate the demographic and perioperative data of the patients who underwent RARP in our institute. **Materials and methods:** All the demographic and perioperative data of our patients who underwent RARP in our institute from Feb 2010 to July 2014 were analysed. The statistical data were compiled and evaluated statistically. **Results:** A total of 512 patient details were available and were analysed. The mean age was 64.67 yrs. Mean PSA and median Gleason sum were 19.9 and 7 respectively. 37% of patients had cT1c stage and 51 % had cT2 stage. The mean console time was 157 min. There was no open conversion. The mean blood loss was 157 ml. 7 patients needed blood transfusion. In the pathological staging, 47.8% of patients were of stage pT2c and 23.6% were of stage pT3b. Positive margin was noted in 26% and lymph node positivity in 14%. The overall complication rate was 7.4% and 1.5% had complication of Clavein grade 3 or more. **Conclusion:** In this large Indian group of patients who underwent RARP, had comparatively higher clinical stage and PSA than western literature. The preoperative and post operative course are similar to the western population.

BKP 03

Most Effective technique of using buccal graft in staged urethroplasty for hypospadias cripple

Joshi Pankaj, Surana Sandesh, Hunter Craig, Shahrour Walid, Kulkarni Sanjay

Kulkarni Reconstructive Urology Center, Pune

Introduction: Management of failed hypospadias presenting as penile urethral stricture and fistulas is challenging. It requires staged augmentation urethroplasty with buccal graft. We analyze our experience of two different techniques of 2 stage urethroplasty. **Material and methods:** This is a retrospective study of 18 homogenous patients. They presented as penile urethral stricture and/or fistula. In Group I (n=10) urethra was opened ventrally like Johansson's Urethroplasty and buccal mucosa inserted in first stage. If satisfactory, Second stage closure was performed after 6 months. In group II (n=8) urethra was opened ventrally as in Johansson's urethroplasty. Second stage was performed after 6 months. Urethral plate was incised in midline dorsally, buccal graft inserted as an inlay and urethra closed. **Results:** Follow group I 16, group II 14 months. 2 patients in Group I had contraction of buccal graft, 2 fistula, 1 infection, 1 dehiscence. 2 required revision grafting with delayed closure after 6 months. 1 patient in Group II had infection. None had fistula or stricture till last follow up (p<0.05). **Conclusion:** Inserting buccal graft in first stage has disadvantages. Buccal graft remains open, may shrink progressively requiring revision. A two stage becomes three stage procedure. It is challenging to tubularize buccal graft as it needs to be mobilized at edges. Lifting graft may lead to ischemia and subsequent fistula/stricture/dehiscence. In our experience, patients in whom buccal graft was inserted at second stage had statistically significant better outcome and has definite advantages over conventional 2 stage repair.

BKP 04

Bladder Pain Syndrome/Interstitial Cystitis: Current Status and Clinical Characteristics in Indian community.

Amita Jain, Rajesh Ahlawat

Medanta -The Medicity, Gurgaon

Introduction Interstitial cystitis/painful bladder syndrome (IC/PBS) is a chronic debilitating condition with increasing incidence globally. Despite of regular update of guidelines by different regulatory bodies still there is a lack of consensus regarding the definition. The purpose of this study is to demonstrate the current disease burden and its characteristics in Indian scenario. **Methods** The data of this retrospective study was retrieved from February 2013 to August 2014. 81 women (65 newly diagnosed incidental cases and 16 previously diagnosed prevalent cases) were identified with diagnosis of BPS. Patients were categorised on the basis of subjective perception of relief in overall symptoms as good (>60% relief), fair (20 – 60% relief) or poor responders (<20% relief) to judge the response of various treatments. **Results** An incidence rate of 545 per 100,000 women attending urological clinic per year was found. The mean age was 56 years (range 23–82 years). The most common presenting symptoms were frequency (60.5%), urgency (49.4%), pain at urethra during micturition (40.9%) and suprapubic pain with full bladder (44.4%). Patients on amitriptyline, pentosan polysulfate sodium and Intravesical instillations showed good response in 44.6%, 27.8% and 38% cases respectively, while recurrence was 10.5%, 40% and 62.5% respectively. Patients received hydrodistension on cystoscopy showed only fair response in 25% (5/20) cases and required additional oral therapy. Only two patients received intradetrusor botulinum toxin. **Conclusion** BPS is still under reported in India. A single, standardised reporting method would help clinicians to understand and communicate best treatment options to these patients.

BKP 05

Ureteroscopic removal of calculus in nonfunctioning kidneys due to ureteric stone: a prospective study outcome analysis

Gupta Rajan, Singh Prabhjot, Dogra PN

All India Institute of Medical Sciences, New Delhi

INTRODUCTION: Nonfunctioning kidneys (NFK) due to urinary tract calculi is second most common indication of nephrectomy in

the developing world. Ureteric calculi are responsible for 16% of NFK. Nephrectomy is done due to the effects of obstruction leading to pain, infection (pyonephrosis), urinary tract infection (UTI), sepsis and hypertension. Our study is the first of its kind in which we have evaluated the role of ureteric calculus removal in non-functioning kidneys due to ureteric calculus only and avoiding nephrectomy. **MATERIALS AND METHODS:** All the patients included had non-functioning kidney on one side due to ureteric calculus. Patients underwent ureteroscopic removal of the calculus. Intraoperative and immediate postoperative parameters with need for ancillary procedures and complications were recorded. On follow up subjective and objective assessment was done. **RESULTS:** Of 20 patients who underwent ureterorenoscopy (URS) 12 patients had impacted ureteric calculus. In one patient interval URS was done and in second patient elective nephrectomy was done after 5 weeks. 2 patients had low grade fever on postoperative day 1. On follow up 2 patients had recurrent UTI and 4 patients had off and on pain not requiring analgesics. None of the patient had pyonephrosis, pyelonephritis, newly developed HTN, malignancy or improvement in renal function on follow up. **CONCLUSION:** Ureteric Calculus removal in patients with non-functioning kidneys due to ureteric calculus can be safely done with minimal morbidity. There is no increased risk of infectious or malignant complications on short term follow up. It is a minimally invasive procedure with lesser morbidity and has a very high patient acceptance.

BKP 06

Is mere symptom control a sufficient and safe indicator to judge the effectiveness of anticholinergics in the management of neurogenic detrusor overactivity (NDO) of spinal cord injury (SCI)?

Dinesh Suman

Indian Spinal Injury Centre, New Delhi

Introduction: Anticholinergics form the first line of treatment for neurogenic incontinence (1,3,8). If the response is not sufficient with the standard dose, it's helpful to double the dose or add another anticholinergic. Clinical improvement, however, is not always reproducible at UDS, which predisposes these patients to high pressure induced structural and functional changes (12,14). We question the validity of following these patients with NDO, solely guided by the symptoms of incontinence, without regard to storage pressure profile. **Objective:** To study if merely symptomatic improvement of incontinence can be taken as a sufficient and safe indicator in the management of NDO. **Methods:** Fifty SCI patients with refractory incontinence to high dose tolterodine (8mg) were treated with the addition of trospium chloride (LA) 60 mg. Bladder diary, Ice water test (IWT) and UDS, done before and one month after the treatment were reviewed. **Results:** After treatment with high dose combination anticholinergics, though the leaks reduced from 16 to 4 per week, IWT remained positive in 30% of patients and UDS showed persistent NDO in 40% of patients. Using combination of both the tests, 46% of patients had inadequate suppression of NDO and persistent high storage pressure after the treatment. **Discussions** Even the high dose combination anticholinergics fails to control NDO in significant number of patients. We suggest UDS monitoring for optimal control of NDO.

SS BAPAT PRIZE PAPERS

INT 01

A novel cell based therapy using Buccal epithelium Expanded and Encapsulated in Scaffold (BEES-HAUS) - Hybrid Approach to treat Urethral S

V. Surya Prakash, Samuel Abraham, Vijaya Bhaskar Reddy, Vijay Kumar Reddy V, Venu M

Narayana Medical College, Nellore

Introduction and Objective: We describe the feasibility of a novel cell based technique using buccal epithelium expanded and encapsulated in Thermogelation Polymer (TGP) scaffold for the treatment of urethral

stricture. Methods: 5 Patients with urethral stricture were included in the study after informed consent and ethical clearance. The lyophilized TGP vial was obtained from Nichi In Biosciences (P) Ltd, Chennai, India. A buccal mucosal biopsy was taken and was transported to the laboratory in phosphate buffer saline (PBS) and TGP at 4°C. Buccal epithelial cells were separated after enzymatic digestion. The cells were cultured along with TGP for 10-12 days. After cell culture, wide urethrotomy was done dorsally from 9'0 clock to 3'0 clock position. The cultured buccal epithelial cells suspended in TGP were instilled to cover the entire urethrotomy site. Results: Per urethral catheter was removed after 3 wks. All Patients voided well with good stream. At follow up scopy the stricture site was healthy, covered by pinkish epithelium, covering the TGP and buccal cells instilled area with good urethral lumen. Biopsy of erythematous patch at previous stricture site showed buccal epithelial cells. 4 patients did not require any auxillary procedure at 1 yr of follow up. one patient had a dense ring at proximal bulbar urethra and he underwent buccal mucosal graft urethroplasty after 18 months of this procedure. Conclusions: Our initial few cases showed that novel cell based therapy using and BEES-HAUS is a promising alternative for the open substitution buccal graft urethroplasty. It is possible to get the benefits of open substitution buccal urethroplasty with this endoscopic technique without donor site morbidity.

INT 02

Experience with a novel 'steerable' basket in PCNL

Madhu Agrawal, Manoj Sharma

Rainbow Hospital, Agra

INTRODUCTION: We are presenting a novel indigenous steerable basket for stone extraction from inaccessible calices in PCNL. To the best of our knowledge use of such an instrument has never been reported anywhere in the world. **MEHODS:** Since October 2013, we have been using an indigenous novel extraction device for removal of stone during PCNL using the standard nephroscope. This is a steerable basket, which can be angulated up to 30 degrees in any direction for entering calyces which are situated at an inaccessible angle, and may cause infundibular tear on attempting direct entry with a rigid nephroscope. The procedure is done under endoscopic and fluoroscopic guidance. **RESULTS:** The basket has been used successfully in more than 50 cases in the last 8 months of use. Being a metallic reusable instrument, it is also a cost-effective device. It is of special value for centre where flexible nephroscope is not available. The only limitation is need for fluoroscopy while engaging stone beyond the visible range. The accompanying video clip demonstrates the technique. **CONCLUSION:** The initial results of 'steerable' basket demonstrate it to be a useful new accessory to percutaneous renal stone removal technique in selected stone population. Further studies will validate these early results. **Acknowledgment:** Mr Sandesh Mishra, BJ Enterprises, Ahmedabad.

INT 03

Fascia lata: A promising substitute for urethral reconstruction

Vaibhav Saxena, Nandini R

Yashoda Hospital, Ghaziabad

Introduction – Fascia lata is used as a tissue substitute in various surgical subspecialties. It is occasionally used in urology for hypospadias repair as second layer. There is only preliminary report of its use for urethroplasty in humans. We successfully used it for first time in four cases for substitution urethroplasty in long segment anterior urethral strictures. **Material and methods-** We used fascia lata in four cases as urethral substitute for long segment of anterior urethral stricture. Graft was used in dorsal on lay fashion in all cases and fixed to bed. In Two patients 2 separate long patches of fascia lata grafts of around 5 cm each were used for penile and bulbar region. In rest of the two patients fascia lata was used as a single patch graft for long segment bulbar urethral stricture. Graft was harvested from anterior aspect of mid thigh in all. **Results-** Mean age of the patients was 32.4 years. Mean length of stricture was 7.2 cm. Catheter was removed after four weeks in all cases. Maximum follow-up was 23 months with mean of 14 months. All patients voided well after catheter removal. One patient required urethral dilatation

after 3 months of catheter removal. Postoperative Uroflometry at 6 months follow-up was normal. Cystoscopy showed normal in growth of urethral mucosa over graft after 6 months. **Conclusion –** Fascia lata seems to be a promising substitute for urethra especially in patients having unhealthy buccal mucosa due to submucosal fibrosis for long segment urethral strictures.

INT 04

Innovation, construction and assessment of a novel laparoscopic port placement system

Ashish Rawandale-Patil

ACPM Medical college and Institute of Urology Dhule

Introduction: Transperitoneal laparoscopy has a significant learning curve. Conventional port placement sets have known disadvantages, complications and prohibitive costs. Our innovative port placement system eliminates these. **Methods:** Considering the surgeon's expectations about an initial port (survey(table 1)); we designed our seamless port placement system using computer aided designing, patented and fabricated it. The 2 mm special initial puncture needle (has a safety mechanism) is inserted with the abdomen tented upwards. It has a barometer which detects a successful peritoneal entry. Safety wire is introduced through it into the peritoneal cavity. The needle is dissembled leaving behind a guided rod system, used for screw dilatation and port placement. Airlock valve allows continuous peritoneal insufflation during port placement. The water well design, markings on the components and endoscopic compatibility, helps confirmation of peritoneal entry of each component. The special tip design of the dilator facilitates blunt port placement by tissue separation; through the same site of the initial puncture. The nonjerky insertion eliminates the possibility of sharp injuries. **Results:(Table 2):** Our system demonstrated (evaluated in 5 cases) lower "port placement times" and "anxiety related to port placement". GRS score indicated a high degree of satisfaction, effectiveness and safety. **Conclusions:** Our port placement system is seamless, reusable and safe. It allow low force, guided port placement through the same entry point as the initial puncture. Has optical and barometric guides Allows visual confirmation before tract dilatation. Allows continuous pneumosufflation during port placement. Developing such systems would reduce the healthcare costs for laparoscopic urology

INT 05

Renal cortical volume, age & 1 YEAR e-GFR in voluntary kidney donors: does a correlation exist?

Nagarajan R, Rizvi SJ, Pal BC, Gandhi S, Modi PR, Bhandari NS

IKDRC & ITS, Ahmedabad

Introduction and objectives: Preoperative donor kidney volume is an independent predictor of graft function in the transplant recipient. Few investigators have looked at factors associated with post-donation renal function in the donor. Pre-operative CT-based renal cortex measurements provide a promising tool to predict renal function in donors, with studies showing a strong positive relationship with GFR. Our aim was to see if CT-based renal cortical volumetry can act as a predictor of residual donor renal function, and if any correlation with donor age exists. **Methods:** 36 donors chosen in whom follow-up s.creatinine at 1 year was available. Initial pre-donation anthropometric data, DTPA renogram and CT scan abdomen information was reviewed retrospectively. CT volumetric assessment of both donor kidneys was done using semi-automated software ("Myrian," Intrasure Systems). e-GFR at 1 year was calculated using the MDRD equation. Sub-group analysis was done by dividing the donors into 2 age-based groups, viz. Group A=Age < 42Y & Group B=Age > 42Y. **Results:** Both total cortical volume (TCV) & residual cortical volume (RCV)% showed a low positive correlation with weight and BSA, but none with age. No correlation was seen between either TCV or RCV% with 1 year e-GFR. No significant difference was found between Groups A&B wrt to TCV, RCV% or 1year e-GFR. **Conclusion:** Neither TCV nor RCV% correlated with preserved function at 1 year. Group B differed from the younger donors with respect to weight & BSA, but this did not translate into differing outcomes at 1 year. e-GFR between the two age-based groups was not significantly different at 1 year follow-up.

INT 06**Magnetic bead based separation of sperms from semen based on hyaluronan binding ability****Joshi P B**

Manipal Ankur Andrology and Reproductive services, Bangalore

Introduction:Conventional techniques of sperm separation are based on motility alone and not by functional competence or genetic quality as occurs naturally in the female genital tract. Hyaluronidase(HA) is a normal component of the cervical mucus and cumulus oophorus and plays a crucial role in selecting functionally competent sperm.The presence of HA binding sites on sperm outer membrane is regarded as a sign of sperm maturity and hence DNA integrity. **Objective:**The aim of this experiment was to evaluate the sperm separation technique from semen on functional basis. **Material and Methods:**25 random samples of semen from patients attending the hospital were used.In this study, HA-coated commercially available micro-sized paramagnetic beads were used extract sperms with HA receptors.The method utilises a technology termed as IFAST(Immiscible Filtration Assisted by Surface Tension). This method extracts the HA bound sperms and eliminates the unbound sperm population by a magnetic bead based approach on a microfluidic platform.Optimization of beads, HA and enzyme concentration was done. The sample concentration was estimated by using Neubauer chamber **Results:**The Bead concentration was optimized to be about 6 μ L,i.e.60 μ g of beads for maximum binding of the sperms.The highest number of sperms was obtained at a concentration of 2 μ g of HA coated on 60 μ g of beads at a concentration of 100 units of hyaluronidase.The entire process takes less than an hour. **Conclusion:**Magnetic bead based separation of sperm from semen based on hyaluronan binding ability provide sperms separation on functional basis which is close to natural selection of sperm in female genital tract.

CHANDIGARH BEST VIDEO PRIZE PAPERS – 1**CBVP 01****Robotic kidney transplantation with regional hypothermia: a step-by-step description of the VUI-Medanta technique (Ideal Phase 2A)****Sood A, Ahlawat R, Kher V, Ghosh P, Jeong W, Bhandari M, Menon M**

Medanta Hospital

Objective: We recently reported preclinical and feasibility studies (IDEAL phase 0-1) of the development of the novel surgical procedure, robotic kidney transplantation (RKT) with regional hypothermia. Here, we report the IDEAL phase-2a studies of technique development. Specifically, we describe our technique of RKT with regional hypothermia in a step-by-step manner along with the safety profile and early graft function in these patients. **Methods:** This is a prospective study of 50 consecutive patients who underwent live donor RKT at Medanta Hospital, following a 3 year planning/simulation phase at the Vattikuti Urology Institute. Demographic details and outcomes are reported for the initial 25 recipients, who have completed a minimum 6 months follow up. The primary outcome was post transplant graft function. Secondary outcomes included technical success/failures and complication rates. The accompanying video details the operative technique. **Results:** All fifty patients underwent RKT successfully; 7 in the phase-1 and 43 in the phase-2 stages of the study. For the initial 25 patients (Table 1); mean console, warm ischemia, arterial and venous anastomotic times were, 135 minutes, 2.4 minutes, 12 minutes and 13.4 minutes, respectively. All grafts were cooled to 18-20oC with no change in core temperature. All grafts functioned immediately post transplant and mean serum creatinine at discharge was 1.3 mg/dl (0.8-3.1 mg/dl). No patient developed anastomotic leaks, wound complications or wound infections. At 6 months follow up no patient had developed a lymphocele detected on CT scanning. Two patients underwent re-exploration, and 1 patient died 1.5 months post transplant of congestive heart failure. **Conclusions:** RKT with regional hypothermia is safe and reproducible when performed by a skilled robotic surgical team.

CBVP 02**Use of intra-operative ultrasound and argon beam coagulation in laparoscopic partial nephrectomy****Santosh Kumar, Rajadoss M, Nitin S Kekre**

Christian Medical College and Hospital, Vellore

Introduction and objectives Laparoscopic partial nephrectomy is being increasingly used for T1a and select T1b tumors with similar oncologic outcomes. Laparoscopic ultrasound helps delineate tumor margin and depth. Early unclamping and unclamped techniques help reduce warm ischemia. We present a video demonstrating the use of intra operative ultrasound and argon beam coagulation. **Methods** 60-year-old lady was incidentally detected to have left renal lower pole mass on ultrasound. She is a known hypertensive and hypothyroid. She underwent lap assisted vaginal hysterectomy and appendectomy 6 years ago. Her preoperative evaluation was within normal limits. CECT showed 2.7x 2x 2 cm, exophytic, well-defined, enhancing left renal lower pole mass arising from the antero-medial cortex with no calcification or fat content. She underwent uneventful laparoscopic partial nephrectomy. Intraoperative ultrasound was used to delineate the tumor margin and identify major arterial feeders. Following application of vascular clamps across the renal hilum, tumor was excised with a margin and hemostatic sutures were taken. This was followed by argon beam coagulation of the tumor bed and release of the hilar clamp. **Results** The duration of operation was 1-hour 30minutes with a warm ischemia time of 20 minutes 45 seconds. She had an uneventful post-operative recovery. There was no blood transfusion. **Histopathology report** was possible carcinoid tumor, with negative margins. Immunohistochemistry reports are awaited. **Conclusions** Intra-operative laparoscopic ultrasound helps locate the tumor, attain negative margin and identify major arterial feeders. Argon beam coagulation is an useful adjunct for hemostasis and reduces warm ischemia

CBVP 03**Boari Flap – Robotic Way!****Vikram Shah Batra, Manav Suryavanshi, Rajesh Ahlawat**

Medanta the Medicity Gurgaon

Introduction: Boari flap with psoas hitch is a salvage procedure for upper ureteric injuries and stricture. Boari can be utilized for injuries as high as pelviureteric junction. We present a video of Robotic Boari flap for a long segment ureteric stricture **Aims and Objectives:** To extend minimally invasive benefits to salvage surgery classically done by open technique **Materials and Methods:** 24 year old male referred to our center with right ureteric stricture , on ATT for 4 months with progressively worsening hydronephrosis and hydronephrosis. The Urine PCR for Myc Tuberculosis was positive. On cystoscopy right ureteric orifice was choked with adequate bladder capacity. CT Urography showed ureteric stricture reaching upto the pelvic brim (L5- S1). Patient was docked in kidney position. Ports were arranged such that they could be used in pelvic procedure too. Complete renal mobilization and nephropexy was performed which provided a renal descent of 5-6 cm. The robot was redocked in a pelvic position. Reverse arrangement of standard Robotic Prostatectomy ports was made with assistant on left side. The junction of dilated & narrow ureter was tracable above the Iliac crossing. Left obliterated umbilical artery release, psoas hitch and Boari flap reconstruction was performed replicating the open steps. **Results** Console time 4 hours 36 min, length of hospital stay from date of surgery 4 days , blood loss 100 cc. **Conclusion** Enhanced anatomical understanding has helped achieve good anatomical correction of a salvage procedure extending minimally invasive benefits to such a patient subset

CBVP 04**Step by step transvesical bilateral ureteric reimplantation in children: A video atlas****MS Ansari**

Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow

OBJECTIVE: Contemporary literature has proven the safety and efficacy of transvesical ureteric reimplantation in children. Most of these series

have described the results of unilateral reimplantation. Here in the author describe the technique of transvesical bilateral ureteric reimplantation in step by step manner in children. **MATERIALS AND METHODS:** A total of 6 patients underwent laparoscopic transvesical bilateral reimplantation by the same surgeon. All the 6 patients had primary VUR. Of these 6 patients, 5 had grade II-III VUR while 1 had grade IV on one side and III on other side. Laparoscopic transvesical bilateral cross-trigonal ureteral reimplantation was performed in all the patients. A pure laparoscopic approach using three 5 mm ports was used. **RESULTS:** The median age was 4.5 years [range 3-8]. The median operative time was 150 minutes [range 130-180]. There was no conversion or any intraoperative complication reported. Median hospital stay was 6 days [range 5-8]. The median follow up is 18 months. On follow up renal dynamic scans normal drainage was reported in all the patients. Reflux resolved in 5 patients. In 1 patient reflux persisted of the same grade i.e. grade IV on one side. This patient had tortuous and dilated ureter [Grade IV] on preoperative voiding cystourethrogram. **CONCLUSIONS:** Laparoscopic bilateral transtravesical reimplantation is safe and feasible. Dilated and tortuous ureters [VUR grade IV] are best to be avoided for this technique.

CBVP 05

Salvage Robot assisted laproscopic prostatectomy in Post High Intensity Focussed Ultrasound recurrent Cancer Prostate

Sudhir Rawal, Amit Goel, Amitabh Singh, Suhas K R, Saurabh Vashishtha

Rajiv Gandhi Cancer Institute and Research Centre, New Delhi

Introduction and Objectives: High Intensity Focussed Ultrasound (HIFU) is an appealing minimally invasive treatment for prostate cancer. However there are few reported salvage treatment for Post HIFU recurrent Cancer prostate. We present our case of Salvage Robot assisted Laproscopic prostatectomy in Post HIFU recurrent Prostate cancer. **Methods:** 104 patients underwent High Intensity Focussed Ultrasound (HIFU) from June 2009 to Jan, 2014. A 58 year male patient with Adenocarcinoma prostate Gleasons 3+4 with S.PSA 13.8ng/ml. MRI (Pelvis) showed lesion involving left Peripheral gland extending posteriorly across mid line. HIFU was done with Sonablate Machine in July, 2009. sPSA gradually increased to 5.74 in June, 2014. MRI pelvis showed small lesion 1.4x0.8cm in left side of Residual prostate in left periurethral region. No enlarged lymph nodes. Bone scan was Negative. Bilateral Nerve Sparing Salvage Robot assisted laproscopic prostatectomy was done. We demonstrate our case of Post HIFU Salvage RALP in recurrent Cancer Prostate with da Vinci Robotic system. **Results:** Post HIFU Salvage RALP in recurrent Carcinoma prostate was technically successful in the patient. Estimated blood loss was 200 ml. Operative time was 120 minutes. Perurethral catheter was removed on tenth day. Post operative hospital stay was 2days. Biopsy showed Residual Acinar Adeno Ca Prostate Gleason 4+4/10. Extra prostatic extension was present. At 3 month follow up patient sPSA was 0.137. **Conclusion:** Post HIFU Salvage RALP in recurrent Carcinoma prostate is technically feasible with good oncological results and minimal morbidity. Salvage RALP stands a good option for localized Prostate cancer in patients with good life expectancy.

CBVP 06

Surgical Technique of Urethra preserving Robotic Anterior exenteration in females for Transitional Cell Carcinoma of bladder

Amit Goel, Amitabh Singh, Suhas K R, Saurabh Vashishtha, Sudhir Rawal

Rajiv Gandhi Cancer Institute and Research Centre, New Delhi

Introduction and Objective. Robotic radical cystectomy techniques and outcomes had been described in a predominantly male patient population in majority of series. The application of such novel techniques to female cystectomy and anterior exenterative procedures has not been well documented and described. The introduction of robotic anterior exenteration has emerged as an alternative to open procedure. We present our Surgical technique of Urethra preserving Robotic Anterior exenteration in females for Transitional Cell Carcinoma of bladder. **Methods:** From February 2011 to August 2014, Robotic radical surgery was done in 140

patients for bladder cancer (Radical cystectomy in 120 males and anterior exenteration in 20 females). Of the females 4 patients underwent urethra preserving anterior exenteration and orthotopic neobladder and 16 underwent ileal conduit formation. We demonstrate our surgical technique of urethra preserving robotic anterior exenteration in a 46 year female patients with transitional cell carcinoma of bladder. **Results:** Urethra preserving Robotic anterior exenteration was technically successful in all 4 patients. Median patient age, body mass index, estimated blood loss were 46 (range 38 -50), 29 (24-30), 230ml (200-270ml) respectively. Average time for urethra preserving anterior exenteration was 85 min. Mean time to liquid diet was 3.2 days. Mean post operative hospital stay was 12 days (12-14days). There was no intraoperative or post operative complication in any patient. **Conclusions:** In our experience, urethra preserving robotic anterior exenteration is minimally invasive, technically feasible surgical treatment in females with bladder cancer with minimal morbidity.

CHANDIGARH BEST VIDEO PRIZE PAPERS – 2

CBVP 07

Nephron sparing excision of left renal hilar functioning paraganglioma

Desai Pragnesh, Rao Niren, Kumar Rajeev

AIIMS, New Delhi

Introduction: A paraganglioma is an extra-adrenal pheochromocytoma arising from the neural crest and comprises 10% of all pheochromocytomas. It is often located near the renal hilum and, when large or surrounding the renal vessels, poses a surgical challenge in preserving the adjacent kidney. We present a case of a perihilar paraganglioma managed laparoscopically with renal preservation. **Material and Method:** A 38 year old male was diagnosed to have a functional 5.9 x 5.7 cm paraganglioma, located in the left renal hilar region and extending between the left renal artery and vein which were both splayed. After pre-operative preparation as per a standard protocol, a 4-port transperitoneal laparoscopic approach was planned. Wide exposure was obtained by mobilizing the colon and spleen completely. The ureter, which was draping the lower pole of the tumor, was identified and separated. The aorta was exposed and the tumor was gently lifted off it, ligating multiple feeder vessels. The renal vessels were identified and looped. The tumor was gradually separated from the artery and vein, preventing injuries before final separation from the hilum. **Results:** The operative time was 210 minutes; estimated blood loss was 500 ml. There were no complications and the patient was discharged on day 3 on lower doses of antihypertensive drugs. A renal dynamic scan at four weeks revealed a viable kidney with decreased function. **Conclusion:** Careful preoperative preparation, meticulous intraoperative anesthetic management, and surgeon experience makes laparoscopic resection of difficult paragangliomas a safe and feasible treatment option.

CBVP 08

Laparoscopic Ileal Ureter

M Ramalingam, K Senthil, M Anandan, MG Pai

PSGIMSR Coimbatore

Introduction: Ileal replacement of ureter is an option in long and multiple ureteric strictures. We present the video of a laparoscopy assisted ileal ureter for multiple strictures of the ureter. **Methods:** 38 year old male presented with recurrent episodes of urinary tract infection. CT Urogram and retrograde ureterogram revealed long upper ureteric stricture with mid ureteric and UVJ stricture. Ureteroscopy with 6 fr URS was attempted and it was not possible to negotiate the ureterovesical junction. A guide wire was placed and a 5 fr JJ stent was placed. Surgical option of ileal replacement of ureter was discussed and the procedure was performed laparoscopically. With the patient in 70 degree lateral position, using 5 ports (2x 10mm and 3x 5 mm) the kidney was mobilised. Gonadal vein was divided. Double renal vein and intrarenal pelvis was noted and dissected. Long upper ureteric stricture was noted. A cut ureteric catheter was taken in side through the 5 mm port and was used for measuring the stricture which was found to be 9 cm. Bladder was mobilised from the anterior abdominal wall. Using a 4 cm transverse incision through the lower abdomen ileal loop was exteriorised and a 20 cm ileal was isolated with the vascular supply and ileoileal continuity was

restored. The loop was internalised after thorough washout of the loop with dilute betadine saline. The proximal end of the ileum was anastomosed to the pelvis using 4-0 continuous vicryl sutures. The distal end was anastomosed to the bladder using 3-0 continuous vicryl sutures. Tube drain was placed. Surgery was completed in 300 min. Patient had increased drain for a week which settled conservatively. Conclusion: Laparoscopic assisted ileal ureter is a feasible less morbid procedure. Exteriorising the ileal loop saves anastomosis time and helps in thorough wash with betadine.

CBVP 09

Retroperitoneal lymphnode dissection in postchemotherapy residual mass: a surgical documentary

Jain S, Suryavanshi M, Gautam G, Ahlawat R.

Medanta - The Medicity, Gurgaon

INTRODUCTION Retroperitoneal lymph node dissection (RPLND) plays a major role in the management of patients with germ cell tumors. The role of surgery continues to evolve owing to advances in chemotherapy regimens, clinical staging modalities, and continued surgical innovation. Retroperitoneum is most frequent site of chemoresistant malignant GCT and teratoma. Traditionally RPLND is performed by open technique. **MATERIAL AND METHODS** A 19 year male patient underwent left radical orchidectomy for testicular mass in Afghanistan (histopathology – NSGCT, ? Teratoma). Six months later he presented at our center with post chemotherapy (4 cycles BEP) residual retroperitoneal mass. Positron emission tomography revealed residual left para aortic mass with solitary segment VIII liver lesion. He underwent bilateral non nerve sparing open RPLND with resection of liver lesion. **RESULTS** About 8x8 cm left paraaortic lymph node mass with 3cm liver mass was excised. Total operative time was 330 minutes and total blood loss was 650 ml. Patient was discharged on day 6. Histopathology report revealed tumor necrosis in the residual retroperitoneal mass with no viable tumor cells seen in the liver lesion. **CONCLUSION** Post chemotherapy RPLND is a difficult and challenging surgery. Therefore a thorough knowledge of surgical anatomy is prudent for performing a successful RPLND

CBVP 10

Robotic radical Cystectomy with neobladder: Simple technique to overcome steep learning

Shashikant Mishra, Ankush Jairath, Arvind Ganpule, Ravindra Sabnis, Mahesh R Desai

Muljibhai Patel Urological Hospital, Nadiad

Objective: To demonstrate an easy and reproducible technique to overcome the steep learning curve of total robotic cystectomy with intracorporeal ileal neobladder. **Material and Methods:** da Vinci® Si robotic platform is used. Cystectomy and extended lymph node dissection is performed in extended trendelenberg position. Mini pfannenstiel incision is placed to remove the bagged specimens. Studer ONB is reconstructed in an extracorporeal fashion after delivering the bowels from the incision site with completed ileal ureter anastomosis. The distal end of the ONB is laid open for the urethral anastomosis. The bladder is placed intra corporeally and the incision closed. The Neo bladder-urethral anastomosis is performed with robot in a 15-degree Trendelenburg position. **Results:** Seven cases were performed with mean OR time 312±44 minutes, blood loss 132±27 ml, hospital stay 11±2.5 days. A single surgeon not having experience of complete robotic intra-corporeal ONB could perform all cases. Clavien 1 complication of fever and paralytic ileus was seen in one patient each. DJ stents and catheter were removed on 3rd post op week. **Conclusion:** This technique enables the advantages of robotic approach of ergonomics and ease for pelvic surgery to be combined to that of speedy and reproducible open surgery to provide optimum results. This would be a gradual way for surgeons to overcome “holy grail” of complete robotic Cystectomy and intracorporeal ONB.s

CBVP 11

Laparoscopic Extended Pelvic Lymph Node Dissection During Radical Cystectomy: Technique and Outcomes

Shashikant Mishra, Sudharsan, Ankush Jairath, Arvind Ganpule, Ravindra Sabnis, Mahesh R Desai

Muljibhai Patel Urological Hospital, Nadiad

Introduction: Laparoscopic radical cystectomy (LRC) is both safe and efficacious. Extending laparoscopic limit by doing extended pelvic lymph node dissection (PLND) and then doing external diversion by a small pfannenstiel incision can further decrease the morbidity of the procedure while maintaining oncological efficacy. **Objective:** To perform and evaluate laparoscopic extended PLND in patients undergoing LRC with ileal diversion by a four-port technique. **Material and Methods:** The essential steps of the procedure include patient in steep 45 trendelenberg position with surgeon and camera assistant on left position, 12 mm supra umbilical port for camera, 12 mm dissection port at previously marked ileal conduit site, 5 mm retraction and assistant port in left and right quadrant. Root of bowel mesentery is reflected cranially to expose aortic bifurcation. The packet is longitudinally divided anterior to the artery (Iliacs and aorta) using the split-and-roll technique. After delivering the packet posterior to the artery, a similar split-and-roll technique is done for the tissue surrounding the external iliac vein. The accompanying video highlights our detailed technique. **Results:** We performed this technique in 37 patients. All were completed in a mean LND time of 108±24 minutes, no blood transfusion. One patient had self-limiting right obturator nerve injury and another had left external iliac bleeding requiring suture repair. The average lymph node yield was 36±8. The pathological stage was N0 (14), N1 (18) and N2(5), respectively. **Conclusion:** Extended PLND during laparoscopic radical cystectomy is technically feasible and safe. Nodal yield is comparable to that of open surgery.

CBVP 12

Retzius sparing approach for robot assisted radical prostatectomy

Anandan Murugesan, Gagan Gautam, Manav Suryavanshi, Feroz Amir Zafar, Rakesh Khara, Prasun Ghosh, Rajesh Ahlawat

Kidney and urology Institute, Medanta

Introduction: Urinary incontinence is one of the most bothersome post operative complications in those undergoing robot assisted radical prostatectomy (RARP). Retzius sparing approach is one of the techniques suggested to improve continence. We present the video of robotic RARP by Retzius sparing approach. **Materials and methods:** 75 yr gentleman presented with incidentally detected raised PSA (13ng/ml). Core biopsy of prostate revealed Gleason 3+3 adenocarcinoma. MRI and bone scan confirmed organ confined disease. Under general anesthesia, standard ports, position and docking was done as for classical RARP. Posterior dissection was done initially and vas and seminal vesicles dissected bilaterally. Plane developed between the prostate and rectum in the Denonvillier's fascia. Bladder was lifted towards the abdominal wall with sutures. Bladder neck was divided at prostate vesical junction. Lateral pedicles controlled and prostatic urethra divided at apex. Vesicourethral anastomosis was done by Van Velthoven technique. **Results:** Operative duration was 180 minutes and console time was 150 minutes. Blood loss was 200ml. Patient discharged on POD2. Catheter removed after 10 days and the patient was completely continent by 3 weeks. **Conclusion:** Retzius sparing approach is feasible and needs minimal dissection close to pubo prostatic ligaments and may help in better preservation of continence. Further studies are needed to ascertain the utility of this approach in maintaining continence.

Chandigarh Best Video Prize Papers – 3

CBVP 13

Microperc in toddlers and preschool children – How we do it?

Vinodh Murali, Jaspreet C, Mishra SK, Ganpule A, Sabnis R, Desai MR

Muljibhai Patel Urologic Hospital

Introduction and objective: In this video we intend to analyze the feasibility, safety and technical modifications of microperc in toddlers and preschool children less than 5 years. **Materials and Methods:** Six children under 5 yrs of age who underwent microperc, were analyzed retrospectively with respect to demographics, operative, postoperative, and follow-up data. After 5 Fr ureteric catheterization, appropriate calyceal access was achieved

using ultrasound and fluoro guidance and then a three-way connector that connects saline irrigation tube, 272 µm laser fiber and a 0.9 mm flexible microperc telescope was attached to the needle. If intrarenal manipulations from one calyx to another was required, a 8 Fr "mini-microperc" sheath was placed. Ureteric catheter was removed along with Foley catheter on first post-operative day. All children were followed up at 1 month with USG and X ray KUB. Results: The mean patient age was 3.66 years (11 months-5 years). The mean stone size and stone density was 12.80±3.71 mm and 1020±370 HU respectively. The mean operative time was 38.34±8.16 min. The mean hospital stay was 48.41±28.31 hours. The mean Hemoglobin drop was 0.53 gm/dl. One child required check nephroscopy in view of the residual gravel after 2 days. One child had grade 1 clavian complication (fever). Complete clearance was obtained in all children at 4 weeks follow up. Conclusions: The high stone clearance rate and lower risk of ureteric trauma and lower need for prolonged post-operative ureteric stenting make it an attractive and viable alternative in children

CBVP 14

Saphenous vein sparing robot assisted video endoscopic inguinal lymphadenectomy (R-VEIL): Steps as video demonstration

T B Yuvaraja, Nikhil Dharmadikari, Harshavardhana Rao, Abhinav Pednekar, Amit Patil, Nikhil Gunavane

Kokilaben Dhirubhai Ambani Hospital, Centre for Cancer, Mumbai

Introduction R-VEIL is a minimally invasive surgical technique of groin node dissection in cancer penis. We present our experience with Saphenous vein sparing (SVS) R-VEIL, to avoid complications highlighting the important surgical steps. **Methods** From Aug 2012 to July 2014, we have performed 14 R-VEIL in 11 patients. Eight patients had unilateral, 3 patients had bilateral surgery and 5 had SVS to minimize the edema of leg. Ten had N0 groin and three had N1 groin. **Technique** of R-VEIL involves a 2-cm mid-thigh incision and developing a plane just deep to Camper's fascia by using finger dissection. Inguinal triangle was dissected to include both superficial and deep lymph nodes in the dissection template. The great saphenous vein was preserved after taking all its tributaries in four groins. **Results** Mean age was 57 years (48- 66), mean console time 38 mts (110-210) for each groin, blood loss 70 ml (30-100ml). None of the patient had wound related complications like necrosis, infection. Average time for lymphorrhea to stop was 14 days. Seven patients had edema of leg upto 3-4 weeks. Four groins with saphenous sparing surgery did not develop any edema. With mean follow up of 15 months none of the patient had local recurrence. One developed para-aortic lymph node metastasis and died of disease. **Conclusions** SVS may reduce post operative venous edema as shown in open surgery literature and is safe and technically feasible. However longer follow up with more number of cases is required to assess the oncological safety.

CBVP 15

High energy holmium-YAG laser combined with suction for large renal stone percutaneous nephrolithotomy (PCNL)

Amit Bhattu, Vinodh Murli, Sabnis RB, Ganpule AG, Mishra SK, Desai MR

Muljibhai Patel Urological Hospital, Nadiad

Introduction and objective: Both laser and pneumatic lithoclast are efficient energy sources for PCNL. The laser fragments stone efficiently however significant time is lost in retrieving gravel created by laser. The goal of this study was to evaluate the efficacy of high power laser combined with suction for PCNL in large bulk renal calculus. **Methods:** After institutional ethical committee approval high power laser with suction was used for PCNL in patients with large bulk renal calculi of size more than 2 centimeters. Exclusion criteria were patients less than 18 years age, patients unwilling for procedure, contraindications for PCNL and patients who had undergone previous procedure in form of PCNL, retrograde intrarenal surgery or shock wave lithotripsy for same renal calculus. **RESULTS** 19 patients were treated by PCNL with high power laser with suction. Stone size and stone volume were 36.84±24.54 millimeters and 10450 cubic millimeters respectively. Operative time and lithotripsy time were 57.5±27.9 and 26.15±19.25

respectively. Mean haemoglobin drop and hospital stay were 1.24 gram/deciliter and 105.3±53.2 hours respectively. All patients were stone free at the time of the discharge. 14 patients had stone free status after first stage of PCNL. 5 patients required check nephroscopy for residual fragments. 12 patients did not have any complications. Clavien-Dindo complication was grade 1 in 4 patients, grade 2 in 2 patients and grade 3A in 1 patient. **CONCLUSIONS** High power Laser with suction is safe and efficacious for treatment of large renal calculi by PCNL.

CBVP 16

Transvaginal sacrospinous ligament fixation for treatment of utero-vaginal prolapse

Vinayak G Wagaskar, Mohd. Ismail, Sujata Patwardhan

K.E.M. HOSPITAL Mumbai

Introduction : The sacrospinous ligament (SSL) extends from the ischial spine to the lateral margin of the sacrum and coccyx. Its anterior surface is muscular and forms the coccygeus muscle. Various treatment options exists for correction of vaginal prolapse, including use of a pessary, colpocleisis or vaginal vault closure, transabdominal vaginal fixation to the sacrum and transvaginal fixation to a pelvic ligament. We performed SSL vaginal fixation via the transvaginal approach for correction Utero-vaginal prolapse. **Aims and objectives:** This video depicts Vaginal hysterectomy with Sacrospinous fixation for patient with 3rd degree UV descent. **Results:** Patient, post-menopausal, with 3rd degree UV descent. Vaginal hysterectomy done. A posterior longitudinal vaginal incision is made, and a plane is developed between the vagina and rectum. The right pararectal space is entered from the rectovaginal space by penetrating the right pararectal fascia. The SSL and overlying coccygeus muscle are palpated medial to the ischial spine as it fans out toward the coccyx. With the SSL under direct vision vicryl 2-0 suture is used to pierce the ligament 1.5 to 2 cm. medial to the ischial spine. Suture taken out through vaginal mucosa. Fixation performed with knot tying up. Vaginal incision closed with vicryl 3-0. **Discussion:** By using a transvaginal approach the incumbent potential complications of laparotomy are avoided and hospital stay as well as recovery to normal activity are shortened. Another major advantage of this technique is maintenance of sexual potency. **Conclusion :** This video depicts Vaginal hysterectomy with Sacrospinous fixation for patient with 3rd degree UV descent.

CBVP 17

Paraganglioma of urinary bladder presenting as early preeclampsia with successful perinatal outcome after surgery

Kaje YD, Patwardhan SK, Ismail MA, Singh AG, Wagaskar VG

GSMC/KEMH, Mumbai

Introduction & Objective: 10-20% of paragangliomas occur at extra-adrenal locations and less than 1% at the urinary bladder. The most common presenting symptom of bladder paraganglioma is hypertensive attacks precipitated by micturition and hematuria. Paraganglioma of the urinary bladder occurring in pregnancy is extremely rare. We present a case of bladder paraganglioma as an unusual cause of early preeclampsia. **Methods:** 24 year old lady presented with complaints of hematuria, micturition syncope, and episodic palpitations with a history of four month amenorrhoea. She had aborted at 6th months with similar complaints during previous pregnancy. On evaluation, she was found to have a bladder tumour and a viable pregnancy of four months. TUR biopsy of the tumour was taken which showed paraganglioma of bladder. Her endocrine work up showed functional tumour. After proper counselling decision of watchful waiting was taken to allow fetal maturity. **Results.** Patient was operated during second trimester for partial cystectomy. Fetal viability was confirmed post operatively. Patient has delivered a healthy female child and she has slight urgency of micturition. **Discussion:** Review of literature revealed that, many centers believe in terminating the pregnancy electively before embarking upon partial cystectomy in such circumstances **Conclusion:** Contrary to the routine, we excised the paraganglioma safely with preservation of pregnancy. Adequate preoperative control of hypertension, detailed counseling of patient's family and endocrinologist's expertise proved crucial in our success.

CBVP 18

Serosa lined Extramucosal Tunnel (Slet): a multipurpose tool for all reconstructive needs after radical cystectomy

Raman Tanwar, Nikhil Khattar, Rishi Nayyar, Rajeev Sood

PGIMER and Dr. RML Hospital, New Delhi

Introduction: A number of surgical techniques with regards to urinary diversion following radical cystectomy have been devised and are in a process of evolution. Abol-Einein and Ghoneim described a technique that created an extramural serosal tunnel into which the ureters were implanted which was later modified by stein and used in catheterisable stoma pouch and rectal diversion. **Materials and Methods:** A total of 24 cases underwent radical cystectomy with urinary diversion at our centre over a period of 3 years. Of these Ileal neobladder was created in 15 patients, continent catheterisable stoma in 2 patients and augmented valved rectum with Hemikoch pouch in 1 patient using the SLET technique and its modification. **Result:** SLET technique could be easily incorporated in various forms of diversion after radical cystectomy with good postoperative results in our initial experience. **Conclusion:** SLET technique has evolved in to a multipurpose versatile tool that caters to needs of various forms of diversion while providing some unique benefits that are not offered by other reconstructive options like the ability to use dilated and short ureters and prevention of direct exposure of urothelium to bowel contents in cases of rectal diversion.

VIJAYAWADA POSTER PRIZE SESSION - 1

VPP 01

Study of accuracy of testicular volume estimation by comparing praders orchidometer and ultrasonography with actual volume measured by water displacement

Amith Chandra K M, Fredrick Paul, Sathish Kumar, Suresh Bhat

Medical College Kottayam

INTRODUCTION AND OBJECTIVES: Precise volume of testis helps in assessing testicular function and evaluating various etiological factors in male infertility/sub fertility and in diagnosing various congenital and sex differentiation disorders in male. **STUDY METHODS:** Patients with diagnosis of prostatic adenocarcinoma, who underwent bilateral orchidectomy as a part of ADT (androgen deprivation therapy) in our institution were evaluated with preoperative scrotal ultrasonography (USG) by a single evaluator. Testicular volume by USG was calculated using formula: length (L) X width (W) X height (H) X 0.71. Prader's orchidometric measurement of testicular volume was done by the co investigator for all the cases. These values were compared with actual volume of the testis measured by water displacement method after orchidectomy. The testes were separated off the epididymis and surrounding layers and placed in a beaker containing full of water. The volume of displaced water was measured which gives the actual volume of the testis. **RESULTS:** 56 patients were included in the study, with total number of testicles being 112. Mean age of patients being 71.53, and mean volume of testis 13.48. Our estimated reliability for orchidometry is 0.90 with 95% CI (0.85, 0.93), which is quite 'small'. And reliability for ultrasonography is 0.80 with 95% CI (0.72, 0.86), which is quite 'small'. **CONCLUSIONS:** This study results have shown that ultrasonography under estimates the testicular volume, where as Prader's orchidometer over estimates. As per our study Prader's orchidometry is more reliable than ultrasonography in estimating testicular volume.

VPP 02

PCNL - Paradoxical Air Embolism

Siddharth Muniasamy D, Chandru T, Natarajan K

Sri Ramachandra Medical Center, Porur, Chennai

A 30 years young lady with complaint of right loin pain was evaluated and was diagnosed of 2.5 cm right renal pelvic calculi. She was planned for PCNL. With no medical morbidity she was given general anesthesia and with the standard procedure right PCNL was done. With ureteric catheter in position, patient turned prone and with double contrast anterior and posterior calyces were identified. Lower calyceal puncture was made and at the same time a

sudden drop in saturation with raising PCO2 following injection of air in ureteric catheter noted. Procedure was abandoned without dilatation and patient turned supine, optimized and oxygen saturation improved and with normal values in ABG, patient extubated. Immediate postoperative period vitals maintained. After 3 hours following extubation patient developed right hemiparesis with left facial deviation. She was shifted to ICU and MRI brain was done showing multiple hyper-intensities on diffusion weighted images (DWI) in bilateral cerebral cortices suggestive of recent infarctions. All post procedural investigations were normal and the repeat MRI brain in 12 hours showed well formed areas of infarction. Patient electively ventilated, as advised by neurologist. Symptomatically she improved and gained conscious and in 4th POD she was extubated. Further consultations and review of literatures proceeded to the phenomenon called PARADOXICAL AIR EMBOLISM, arises when air/gas entrained in the venous circulation manages to enter the systemic arterial circulation causing symptoms of end-artery obstruction. She improved progressively and on POD 12 she was able to walk without support and hence she was discharged. She has been on regular followup with no worsening symptoms till 6 months.

VPP 03

Robot assisted simple prostatectomy - millin's retropubic approach for severe benign prostatic hyperplasia - initial clinical experience at tertiary centre

Desai Pragnesh, Rao Niren, Nayyar R, Singh Prabhjot, Dogra P N

AIIMS, New Delhi

Introduction: Despite the advance for management of large volume Benign prostatic hyperplasia (BPH), open simple prostatectomy (OSP) remains the gold standard. First laparoscopic simple prostatectomy (LSP) was performed in 2006, however, the technical difficulty and steep learning curve of pure laparoscopic approach has prevented its wider acceptance. Robotic platform potentially overcomes these constraints by providing 3D vision and exceptional dexterity to facilitate more technically demanding steps of Simple prostatectomy. **Material and Method:** From September 2013 to August 2014, total 5 patients with having large volume prostate underwent Robot assisted simple prostatectomy (RASP-Millin's retropubic approach). Indications for RASP included refractory urinary retention in two patients and failed medical management in 3 patients. Postoperative management consisted of continuous bladder irrigation and close suction pelvic drainage without suprapubic catheter drainage. **Results:** Average age was 67 years (61-74), estimated blood loss was 280 ml (100-400), operative time was 162 minutes (120-270), hospital stay was 3.4 days (3-4) and Foley catheter duration was 10 days. The drain was removed at a mean 3 days (2-4). Mean prostate volume on preoperative ultrasound was 100.4 cc (80-156). All patients were completely continent within one month postoperatively. On patient had epididymo-orchitis. Serum PSA was 2.24 ng/ml (0.63-3.95). Histopathology reveals BPH in all cases. **Conclusion:** RASP is safe and reproducible when performed by experience robotic surgeon and provides similar outcome with minimal blood loss and difficulty as compares to OSP. Larger prospective comparative studies and follow up are needed to evaluate the proper place of this technique.

VPP 04

Non urologic causes of bladder outlet obstruction in males; 2 rare case reports

Sanman KN, Shetty Ranjit, Prabhu Laxman G G, Gurucharan, Venugopal P

Kasturba Medical College, Mangalore

INTRODUCTION AND OBJECTIVE: Bladder outlet obstruction (BOO) is an well defined entity with various described causes in males, including benign prostatic hyperplasia. Here by we are reporting 2 rare non urologic causes of bladder outlet obstruction we encountered. **MATERIALS AND METHODS:** The two male patients in their 50's presented with acute urinary retention with 1-2 month history suggestive of obstructive voiding. On digital rectal examination (DRE), first patient was found have large mass lesion filling the rectal lumen from posterior surface. Rectal mucosa was free. Prostate was felt normally. PSA level (Prostate specific antigen) was normal. DRE of second patient revealed a large non tender tense lesion in anterior rectum with free rectal mucosa. PSA was elevated (145ng/ml). **RESULTS:** First case, Ultrasonography (USG) was suggestive of mass lesion posterior to bladder. CECT (contrast enhanced computerized tomography)

abdomen and pelvis and subsequent MRI revealed a mass lesion arising from spinal cord. Biopsy was suggestive of Chordoma. In second case, USG and CECT suggested an enhancing cystic mass lesion in pelvis? Inflammatory? neoplastic. This patient went in intestinal obstruction during hospital stay and aspiration of mass revealed feculent material, which grew E. Coli. Laprotomy revealed sigmoid diverticulae with well walled off pelvic abscess. Patient improved after abscess drainage and PSA returned to normal. Conclusion: These two cases, Chordoma and pelvic abscess represent the rare non urologic causes of bladder outlet obstruction in a male, that can present with retention of urine, suggesting the need of detailed evaluation of BOO.

VPP 05

Penile fracture- an evaluation of 20 cases

Rajkumar Singha Mahapatra, S.Chowdhury, B.Ghosh, D.K.Pal, M.K.Bera

IPGMR & SSKM Hospital, Kolkata

INTRODUCTION AND OBJECTIVES: Penile fracture is a rare emergency in urology. It is the rupture of the tunica albuginea which envelops the corpus cavernosum due to trauma to the erect penis. Early surgical exploration and defect closure of the tunica albuginea is the therapy of choice. We studied the clinical presentation and outcome of the surgical treatment of penile fractures. **METHODS:** Twenty two patients presented with fracture penis were prospectively studied from April 2013 to August 2014. Patients were assessed with history, physical examination and ultrasonographic evaluation. Data were analyzed by Microsoft Excel 2007. **RESULTS:** The mean age was 32.09 years (19-56 years). Mean duration of presentation was 13.18 hrs with a range 6-56 hrs. Location of fracture in 17 cases was proximal shaft and in 5 cases, middle shaft of penis. Most common cause of injury was sexual intercourse (68%). Right corpora was injured in 15 cases (68.1%). Concomitant urethral injury was found after exploration in one case. Preputial necrosis was seen in one case. **CONCLUSIONS:** Though rare, penile fractures are increasingly being reported. Immediate surgical exploration and repair results in better cosmesis and sexual functions. Close follow-up of patients is required for early detection of problems.

VPP 06

Extensive necrosis of bladder with segmental ureteric necrosis after elective embolization for uterine fibroids - a catastrophic complication

Dheeraj Kasaraneni, Nagaraj H K, Prakash Babu S, Tarun J, Amit K, Kailash B, Avinash P

M.S Ramaiah Medical College and Hospital, Bangalore

INTRODUCTION: Uterine artery embolization as opposed to surgery for the treatment of uterine fibroids has become increasingly popular. However, there is still considerable uncertainty with respect to the morphologic changes induced by UAE. **CASE REPORT:** We report a case of a 42-year-old lady who had undergone selective bilateral uterine artery embolization for symptomatic fibroid uterus and presented to us with an utero-vesical fistula 5 weeks after the procedure. We explored her and found extensive necrosis of bladder, right lower ureter, uterus, right ovary and cervix and performed debridement of the slough and necrotic tissue with hysterectomy, right salpingo-oophorectomy, augmentation cystoplasty and right ureteric reimplantation for this lady. Patient recovered well and was asymptomatic till 4 months after surgery. She was followed up with cystoscopy, urography and uroflowmetry after 3 months, which were normal. **CONCLUSIONS:** To the best of our knowledge this is the first case of simultaneous bladder and ureter necrosis along with uterus and ovary following embolization of bilateral uterine arteries. We suggest the need for extended period of surveillance of patients for urological complications after uterine artery embolization after the procedure.

VPP 07

Elevated psa level as only manifestation in IGG4 prostatitis: a rare clinical scenario

Pandey PK, Jain V

Institute of Liver and Biliary Sciences, New Delhi

INTRODUCTION AND OBJECTIVE IgG4 related disease is a systemic

disorder involving multiple organ systems including genitourinary system. IgG4 related prostatitis in these patients is a known clinical entity. We report a case of a young male who was incidentally diagnosed with IgG4 related prostatitis on TRUS guided prostatic biopsy for raised serum PSA levels. **METHODS** A 45 year old male patient presented with raised Serum Prostate Specific Antigen (S PSA) of 7.16 ng/ml in absence of any lower urinary tract symptoms during evaluation for non-specific generalized bony pain. His digital rectal examination was normal and repeat S PSA after 4 weeks showed rising pattern (10.47 ng/ml). Subsequently, extended core (12 cores) TRUS guided prostatic biopsy was done that revealed the diagnosis of IgG4 related prostatitis. Serum IgG4 levels and whole abdomen contrast CT scan was advised in view of systemic nature of the disease. In absence of urological symptoms, only corticosteroids were started to evaluate change in S PSA levels. **RESULTS** The Serum IgG4 level was 30 mg/dl and whole abdomen CT scan was normal. Repeat S PSA levels 4 weeks after starting corticosteroids was reduced to 4.5 ng/ml. The patient is on regular follow up with us with no urological symptoms till date. **CONCLUSIONS** In young male with raised serum PSA in isolation, IgG4 related prostatitis should also be considered in differential diagnosis. In addition, medical management with corticosteroids shows improvement in S PSA levels in addition to symptoms if any.

VPP 08

Transvesicoscopic Cross-Trigonal Ureteral Reimplantation for Bilateral Vesicoureteric Reflux - Lessons Learnt

Sohrab Arora, MS Ansari, Nitesh Patidar, Varun Mittal, Manoj Kumar, Sanjoy Kumar Sureka, Prempal Singh

Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow

Introduction We describe the critical steps, techniques and follow up of 22 cases of transvesicoscopic cross-trigonal ureteral reimplantation (TVR) for bilateral primary vesicoureteric reflux (VUR) **Methods** Twenty-two patients (25 refluxing ureters) underwent TVR between 2010 and 2014. Three 5mm ports, one for the camera at the bladder dome, inserted under cystoscopic vision and two additional 5mm ports were inserted on the lateral bladder walls. CO2 pneumovesical pressure was 12-15 mm Hg. Perurethral and suprapubic catheters were kept for 48 hours postoperatively. Success was defined as complete resolution after 3 months. **Results** Mean patient age was 6.12±3.14 years. Grade II reflux was present in 14, grade III in nine and grade IV in two refluxing ureters. Mean operative time was 119 minutes. There were two conversions, one due to displacement of initial port into extravascular space and the other due to injury to peritoneum during mobilization of ureter. Success rate was 92%. Two cases, both with unilateral grade 4 reflux preoperatively had persistent grade I reflux till a follow up of 12 and 15 months respectively. **Conclusions** TVR has a success rate equalling the open technique with proper patient selection. Success rate is low with high grade reflux, dilated and tortuous ureter. The procedure is difficult in small children and small capacity bladders. Ribbed ports should be used and secured with sutures. In a smaller child, trocars should be close to umbilicus and medial while in older child, they can be more lateral and caudal, but not too close to the ureteric orifice. Stay close to the ureter while mobilization.

VPP 09

Triplication of urethra with incomplete duplication of phallus with penoscrotal hypospadias; A Very Rare Case

Patidar Nitesh, Varun, Arora Sohrab, Kumar Manoj, Ansari M S

SGPGIMS, Lucknow

Background Penile duplication (diphallus) with triplication of urethra is an extremely rare disorder and is usually associated with other malformations like double bladder, cloacal extrophy, imperforate anus, and gastrointestinal anomalies. We are reporting a rare case of Triplication of urethra with incomplete duplication of phallus with penoscrotal hypospadias. **Case Presentation** A 2 years old male child with history of imperforate anus (anoplasty done elsewhere at 2nd postnatal day) presented with complaints of abnormal phallus with three openings and voiding through all three openings since birth. On examination two openings were present in glans and one opening in penoscrotal region with penoscrotal hypospadias. Incomplete duplication of glans was also present. On further evaluation

with cystoscopy and retrograde pyelography and DMSA scan, patient was found to have triplication of urethra, bilateral ectopic ureters with left nonfunctioning kidney. Perineal urethrostomy with glansectomy of duplicated glans with detachment of the upper two urethra from the main urethra was done as a stage 1 procedure. Conclusion In our review of the literature, we did not come across any other case of triplication of urethra with incomplete duplication of phallus with penoscrotal hypospadias with bilateral ectopic ureters with imperforated anus.

VPP 10

Pediatric urethral strictures: best treatment options; SGPGI experience

Kudchadkar Sharmad, Ansari M S, Sanjoy Surekha, Anubhav Raj

SGPGI, Lucknow

Introduction and objectives: Pediatric urethral strictures is unlike adult urethral strictures has its own unique principles of management. They are difficult to manage then the adult variants due to restricted anatomical factors as limited pelvic access, short length of urethra, difficulty in mobilizing the urethra for anastomosis, high bladder and prostate. We intend to formulate the best treatment policy in managing these cases by doing a retrospective analysis. **Material and methods** We analyzed the hospital records, operation and admission registry from a time period of 1998 to 2014. We excluded patients with failed hypospadias repair from our study. We noted the investigation analysis, procedure details, length of stricture, etc. We noted the postoperative followup of the above patients and reasons for recurrence. **Results** We have analyzed 126 patients. The etiological factors for anterior urethral strictures out of 67 pts were due to inflammatory strictures 34, traumatic 17 and 9 congenital with 7 idiopathic cause. Posterior urethral strictures were mostly due to traumatic cause (96%). Mean age at presentation was 8.6 years (range 3-18) and mean follow-up was 42.8 months (range 12-144). In our experience we noted 48 cases of posterior urethral stricture disease, all of which were due to traumatic etiology. 16 patients needed transpubic or retropubic urethral repair and rest were managed with progressive perineal U.P. We devised a treatment protocol for children < 5yrs, the length for E-E UP was 1.5 cm, 1.5-2 cm for age group of 5-10 yrs and upto 3 cm for > 10 yrs. For patients above 10 yrs with length of >4cm -for ant urethral strictures, buccal onlay or 2 stage UP was advised and for post strictures prepuccial / pedicled penile skin repair was advised. Recurrence rate for E-E UP was 8% which were treated with further DVIU and only 2 pts needed redo U.P and all patients were continent after surgery. 67 patients were treated for anterior urethral strictures with DVIU having a success rate of 56% with rest needing subsequent U.P. E-E UP had a good success rate of 87% with no postoperative complications. Most patients had a good followup of 8.6 years and maintained good flow rates on follow up. Substitution urethroplasty with BMG yielded a success rate of 82% and STSG 81% (3 patients) and penile pedicled flap (5 patients) had 81% success rate. On univariate analysis stricture length, presence of spongiofibrosis and etiology were found significant for predicting recurrence, but on multivariate analysis, only etiology and associated spongiofibrosis were found significant to predict recurrence. **Conclusion** We have noted a low complication and recurrence rate for our applied protocol for pediatric urethral stricture. E-E UP had a low recurrence rate of 8% and substitution UP had a success rate of 82-88% which is higher than most published studies in literature.

VPP 11

Management of Bulbar Urethral Ischemia and necrosis with long gaps after failed urethroplasty for PFUDD

Joshi Pankaj, Surana Sandesh, Hunter Craig, Shahrouh Walid, Kulkarni Sanjay

Kulkarni Reconstructive Urology Center, Pune

Introduction: Management of failed urethroplasty for PFUDD, with resultant long gaps is not well defined. Bulbar necrosis is significant loss of bulbar urethra. This is due to poor retrograde blood supply. Improper inferior pubectomy may damage dorsal penile artery adjacent to vein. **Patients and Methods:** Ours is a tertiary referral. 54/800 PFUDD had bulbar ischemia (partial or complete). All patients had >2 previous surgeries. Management was dependant on length of urethra to be created, urethral

plate, prepuce, status of scrotum. P1 -long gap-substitution and P2 narrow plate needing vascularized flap. **Results:** P1 30 underwent pedicled preputial tube urethroplasty. 4 oral mucosa flap urethroplasty *3 scrotal dropback. 3 patients had dorsal BMG and ventral pedicled penile skin flap. P2 10 underwent pedicled penile flap as onlay, 4 oral mucosa flap. *In oral mucosa flap BMG is applied in dartos of scrotum in first stage. After optimal take up graft is mobilized on midline scrotal septum, flap transposed to perineum and then either used as onlay or tubularised. Followup range 5-120 months. 22/30 preputial tube had diverticulum. 4 proximal anastomotic narrowing. 1 incontinence. Majority complained of post micturition dribbling. 4/8 patients of oral mucosa flap were successful. **Conclusions:** Bulbar urethral necrosis leads to long gaps. Preputial tube patients do well. Oral mucosa flap is the new technique where vascularised random buccal graft flap can be used for substitution. Scrotal drop back had unsatisfactory outcome. Lateral pubectomy should be avoided in order to prevent damage to dorsal penile artery.

VPP 12

Management of urethrovaginal fistula associated with pelvic fracture urethral distraction defect in females

Kale N, Pal B, Modi P, Bhandari N

Institute of Kidney Diseases and Research Centre Institute of Transplantation Sciences, Ahmedabad

Introduction & Objective : Female pelvic fracture associated urethral injury is very rare. We present two cases of pelvic fracture associated urethrovaginal fistula treated in our institute. **Methods:** Two female patients aged 45 & 26 years presented to us with pelvic fracture associated urethrovaginal fistula. Both patients had a delayed presentation with continuous incontinence of urine. After thorough evaluation both patients underwent bladder neck closure & mitrofanoff procedure using tapered ileal loop. The younger patient had vaginal stenosis which was treated. **Observations :** Mitrofanoff procedure was completed successfully in both cases. In the postoperative period both patients were completely dry and urine was being drained by intermittent catheterization of mitrofanoff opening. Till the last follow up both patients are completely dry. The younger patient was pregnant in last follow up. **Conclusion:** Mitrofanoff procedure is an acceptable alternative in delayed presentation of urethrovaginal fistula after pelvic fracture.

VIJAYAWADA POSTER PRIZE SESSION - 2

VPP 13

A successful model of cadaver transplant programme

Arun Kumar P, Prakash JVS, Karunamoorthy R, Ilamparuthi C, Selvaraj V, Thiyagarajan K

Madras Medical College, Chennai

INTRODUCTION AND OBJECTIVE: Cadaver renal transplantation is being established as a viable alternative to renal transplantation to meet the increasing demand for donor organs. The objective of the present study is to bring out the successful evolution of the processes involved in the cadaver transplant programme in our institution. **MATERIALS AND METHODS:** A retrospective descriptive study was carried out and data of all the cadaver renal transplantations done in our institution from 1996 to Aug 2014 was collected from the medical records. The details of registration for the cadaver transplant programme and the processes were collected from the Govt. of Tamilnadu website designed specifically for the above purpose. **RESULTS:** 146 cadaver transplantations were carried out from 1996 to Aug 2014. There has been a marked increase in the cadaver transplantations in our institute since 2008 which attributed to the change and simplification of the process involved in organ allocation by the government. The convener of cadaver transplant program on identification of a brain dead patient willing to donate activates a well designed protocol wherein government and private hospitals are alerted and the patients waitlisted for the cadaver transplant programme are benefitted according to their seniority. The role of public private participation, NGOs, transplant co-ordinator, nephrologists and urologists is cornerstone for the success. **CONCLUSION:** A successful well designed protocol driven cadaver transplant programme is in place in our institution which can be adopted widely in other parts of our

country to meet the growing demand of donor organs for tackling the burden of chronic kidney disease.

VPP 14

Renal artery reconstruction in deceased donor kidney transplant using donor's iliac artery

Bansal J, Jamal SJ, Pal BC, Khemchandani S, Modi PR, Bhandari NS

Smt. G R Doshi and Smt. K M Mehta Institute of Kidney Diseases and Research Center, Ahmedabad

Introduction: Renal artery aneurysm (RAA) in itself is a rare entity. It is even rarer to find it in a deceased donor kidney. **Method:** Two diseased donor kidneys were found to have RAA on bench surgery. Harvesting of the iliac vessel is a routine practice during deceased donor organ harvest at our institute. One such harvested kidney had a single aneurysm of 8mm and another had two thin wall aneurysms of 4mm size. In both cases the aneurysm was present near the hilum at the bifurcation. Resection was done proximal to aneurysm leaving only 4-6mm renal artery stump. Reconstructive lengthening of the renal artery was done using donor's iliac artery graft. In the first case external iliac artery (EIA) and in second internal iliac artery (IIA), because EIA was severely atherosclerotic, used as an interposition graft. **Results:** Both kidneys were well perfused and turgid immediately after clamp opening. Adequate urine output and creatinine clearance was present in immediate post operative period. Patients were discharged with s.creatinine level of 1.07 & 0.95, with an uneventful hospital stay. Follow-up graft color doppler study did not reveal any anastomotic site lesion after 67 and 16 month. **Conclusion:** Incidentally found RAA is not a contraindication for transplantation. With organ supplies being scarce, every effort should be made for renal salvage. Deceased donor vessel procurement should become an integral part of organ harvesting protocol, as it can occasionally prove to be vital.

VPP 15

Predicating pathologic outcomes in patients undergoing robot-assisted radical prostatectomy for high risk prostate cancer: a preoperative nomogram

Sood A, Abdollah F, Sammon JD, Peabody JO, Bhandari M, Menon M

Henry Ford Hospital, Detroit, MI, USA

Objectives: Robot-assisted radical prostatectomy (RARP) role in treating high-risk prostate cancer (PCa) patients remains unclear. To identify which high-risk PCa patients may harbor favorable pathologic outcomes at surgery. **Methods:** We evaluated 810 patients with high-risk PCa, defined as having ≥ 1 of the following: PSA >20 ng/ml, Gleason score ≥ 8 , clinical stage $\geq T2c$. Patients underwent RARP with pelvic lymph node dissection, between 2003 and 2012, in one center. Favorable pathologic outcome was defined as specimen-confined (SC) disease (pT2-T3a, node negative, and negative surgical margins) at RARP-specimen. Logistic regression models were used to test the relationship among all available predictors and harboring a SC PCa. A logistic regression coefficient-based nomogram was constructed and internally validated using 200 bootstrap resamples. Kaplan-Meier method estimated biochemical recurrence-free (BCR) and cancer-specific mortality (CSM) free survival rates, after stratification according to pathological disease status. **Results:** Overall, 55.2% patients harbored SC disease at RARP. At multivariable analysis, PSA level, clinical stage, primary/secondary Gleason scores, and maximum percent tumor quartiles were all independent predictors of SC PCa (all $P < 0.04$). A nomogram based on these variables showed 76% discrimination accuracy in predicting SC disease, and very favorable calibration characteristics. Patients with SC disease had significantly higher 8-yr BCR- (72.7% vs 31.7%, $P < 0.001$) and CSM-free survival rates (100% vs 86.9%, $P < 0.001$) compared to non-SC disease patients. Study is limited by retrospective design and lack of external validation for the newly developed nomogram. **Conclusions:** We developed a novel nomogram used to predict SC disease at RARP. Patients with SC disease achieved favorable long-term BCR- and CSM-free survival rates at RARP. The nomogram may be used to support clinical decision-making, and aid in selection of high-risk patients most likely to benefit from RARP.

VPP 16

Isolated cardiac metastasis : A Rare Scenario In Case Of Carcinoma Penis

Kalpesh Parmar, Santosh Kumar

PGIMER, Chandigarh

INTRODUCTION : Squamous cell carcinoma of penis is a rare genitourinary malignancy and presents in elderly age group. Risk factors include uncircumcised penis, smoking and exposure to HPV virus. The usual sites of metastasis include the inguinal and pelvic lymph nodes ,liver, lungs and bones. Intracardiac metastasis occurs rarely with most of the cases detected on autopsy. Cardiac metastases usually involve the pericardium and less commonly the myocardium. **CASE REPORT :** A 40 year male patient presented with growth over glans penis on wedge biopsy proved to be squamous cell carcinoma underwent partial penectomy. As a staging evaluation, PET CT revealed bilateral inguino pelvic nodes and large right ventricular cardiac metastasis. Patient received local pelvic radiotherapy and systemic chemotherapy with partial response. On follow up, patient underwent pleuro – pericardial window for malignant pericardial effusion and biopsy of pericardium proved metastatic squamous cell carcinoma. Patient is doing well on follow up **CONCLUSION :** Cardiac metastasis is a rare occurrence in penile cancer and systemic chemotherapy remains the only therapeutic option albeit with limited efficacy.

VPP 17

Serum based proteomics approach for appraisal of Low- and High-Grade Bladder Cancer

Saurabh Gupta, Satya Narain Sankhwar, Navneeta Bansal, Ashish Gupta, Vishwajeet Singh, Apul Goel, Yogesh Garg

King George's Medical University, Lucknow

INTRODUCTION AND OBJECTIVE To address the shortcomings of urine cytology and cystoscopy for screening and grading of urinary bladder cancer (BC) we applied a serum-based proteomics approach as a surrogate tactic for rapid BC probing. **MATERIAL and METHODS:** This study was performed on 90 sera samples comprising of low-grade (LG, n=33) and high-grade (HG, n=32) BC, and healthy controls (HC, n=25). Two-dimensional gel electrophoresis (2DE) tactic was executed to describe serum proteome. MALDI-TOF-MS (MS) was used to identify the characteristics of aberrantly expressed proteins in 2DE and validated using Western blot (WB) and ELISA approach. Receiver operating characteristics (ROC) curve analysis was also performed to determine the clinical usefulness of these proteins to discriminate among LG, HG and HC cohorts. **RESULTS:** This comprehensive approach of 2DE, MS, WB and ELISA reveals five differentially expressed proteins. Among them two biomarkers (S100A8 and S100A9) were able to accurately (ROC, 0.946) distinguish 81% of BC (LG+HG) cases compared to HC with highest sensitivity and specificity. Only two potential biomarkers (S100A8 and annexin V) were capable to precisely (ROC, 0.975) distinguish 91% HC and LG cases with substantial sensitivity and specificity. With a comparable tactic, two biomarkers (S100A8 and S100A4) were able to precisely (ROC, 0.941) discriminate 92% of LG cases from HG with utmost sensitivity and specificity. **CONCLUSIONS:** Serum proteomics probing appears to be an encouraging and least-invasive tactic for screening and grading of BC

VPP 18

Safety of selective nerve sparing in high risk prostate cancer during robotic prostatectomy

Kumar Anup, Samavedi S, Sivaraman A, Ebra G, Palmer K, Patel V

Global Robotic Institute, Florida

Introduction & Objectives We report our pathological outcomes in patients who underwent selective nerve sparing with pre operative D\`Amico high risk prostate cancer. **Material & Methods** Between Jan 2008 till June 2013, 541 patients underwent robotic prostatectomy for D\`Amico high risk prostate cancer. Criteria for full nerve sparing were non palpable disease, 3 cores involvement and T3 disease with multiple cores involvement for non nerve sparing procedures. Degree of nerve sparing (NS) was graded intra-operatively by the surgeon independently at either side as complete

(group 1), partial (group 2) or none (group 3). Side specific margins were assessed to predict subjectivity of the intra operative judgment. Results Of 541 patients who underwent RARP 139 underwent complete (group1), 343 patients underwent partial (group 2) and 59 patients underwent non nerve sparing procedure (group 3). There were no difference in pre operative characteristic between the groups ($p=0.678$), but group 3 had higher Gleason score sum ($p<0.001$), and higher t stage ($p=0.038$). Post operatively Extra prostatic extension (<0.001), seminal vesicle invasion ($p<0.001$) and tumor volume ($p<0.001$) were higher in Group 3. Side specific margins rates were higher for non nerve sparing compared to partial and full nerve sparing RARP ($p=0.0167$). Conclusions Subjective nerve sparing using the surgeon's intra-operative perception correlated significantly with negative margins and extra prostatic extension. Full nerve sparing and partial nerve sparing had lower positive surgical margin rates in a high risk population. Use of pre-operative factors and surgeon judgment can appropriately evaluate in high risk patients for nerve sparing surgery.

VPP 19

Oxalobacter formigenes: Opening the door of probiotic therapy for the treatment of hyperoxaluria

Jairath Ankush, Parekh N, Mishra SK, Ganpule A, Sabnis RB, Desai MR

Muljibhai Patel Urological Hospital Nadiad

Objective: To determine the early effect of the administration of Oxalobacter formigenes in the metabolic pattern of patients with calcium oxalate stones, comparing it with potassium magnesium citrate (KMgCit). Methods: Eighty patients were randomized to receive either 30 mEq of KMgCit or 700 millions of O. formigenes, both twice a day. Serum creatinine, serum uric acid, serum calcium and phosphorus, serum iPTH (if serum calcium >10.5 mg/dl) and 24 urine metabolic evaluation for various metabolites like oxalate, calcium, phosphorus, citrate, magnesium, uric acid and creatinine were evaluated at baseline and at one month after starting the treatment. Results: In both groups hyperoxaluria was the most common abnormality followed by hypercalciuria. The incidence of hyperoxaluria decreased at one month when compared to baseline in both KMgCit (77.5% vs. 37.5%, $p = 0.0006$) and O. formigenes preparation (82.5% vs. 15%, $p < 0.0001$) groups, while other urinary metabolic abnormalities were similar at baseline and one month in both groups. Three patients in the KMgCit presented mild self-limited secondary symptoms. Conclusions: When compared to KMgCit, O. formigenes preparation is more effective in decreasing the incidence of hyperoxaluria, opening the door to probiotic therapy as potential new weapon against hyperoxaluria.

VPP 20

Prospective randomized comparison of Microperc and RIRS for lower calyceal (LC) calculus < 15mm

Vinodh Murali, Bhattu A, Mishra SK, Ganpule A, Sabnis R, Desai MR

Muljibhai Patel Urological Hospital

Introduction The management of lower calyceal calculus has always been a matter of debate. The objective of this study is to compare the outcome of retrograde intrarenal surgery (RIRS) and microperc for LC stone less than 15mm. Material and method: After institutional ethical committee approval and informed consent, we prospectively randomized 20 patients having LC stone less than 15mm into RIRS and microperc. Various parameters were noted prospectively. Results: 10 patients were randomized in each group. Age, stone size, operative time, haemoglobin drop, VAS at 24 hours, hospital stay in Microperc Vs RIRS were 39.0q19.2 Vs 41.1 q11.2 years, 9.7 q2.5 Vs 10.26q2.63mm, 30q12.74 Vs 35.5q10.1 minutes, 0.7q0.36 Vs 0.08q0.22 gm/dl, Vs 3.43q1.13 vs 2.6q0.7,74q 20 hours vs 62q12 hours respectively. In both groups the stone free rate at 1 month was 100%. Two patients in RIRS required conversion to microperc and one patient to miniperc in view of difficult access. DJ stenting was required in 22% in microperc group and in 85% in RIRS group. In Microperc group one patient had Clavian grade 2 complication and another grade 3 complication requiring DJ stenting post operatively. In RIRS group no patients had any complications. Conclusion: Both Microperc and RIRS are efficient and comparable procedures for LC calculus. Microperc is associated with lesser conversion to other procedures and lesser need for DJ stenting. RIRS patients had no complications and

minimal blood loss. Further large multicentric randomized controlled trials are necessary.

VPP 21

Comparison of spot vs 48 hour urinary metabolic evaluation in pediatric stone patients.a prospective study

Laddha Abhishek, Goti Ashish, Mishra Shashikant, Ganpule Arvind, Sabnis Ravindra, Desai Mahesh

Muljibhai Patel Urological hospital, Nadiad

Introduction and objectives: Metabolic evaluation for pediatric population by 48 hour urinary collection is cumbersome and often leads to inaccurate collection. A more convenient method for collecting urine samples will facilitate the treatment and future prevention of kidney stone disease in such age group. Aim of our study was to compare spot sample with 48 hour sample. Methods: A total of 25 patients less than 16 years of age with history of calculi were evaluated with spot urinary and 48 hour urinary sample. 100 documented non stone formers were evaluated in community setting and served as control. Results: Mean age of patients in our study is 10.24q4.26 years (range 5 to 14 years) with male to female ratio of 4:1. Mean 24 hr urine volume was 1680q493 ml. 24 urine samples detected more Hypercalciuria ($P=0.005^*$) while spot samples detected more hyperphosphaturia ($P=0.001^*$) and hypomagnesuria ($P=0.01^*$). Both samples provided similar quantification for Hyperuricosuria ($P=0.525$), Hyperoxaluria ($P=0.39$) and Hypocitraturia ($P=0.12$). Conclusion: Spot sample is interesting screening tool in pediatric patients however there were discrepancy between the current gold standard 48 hour urinary evaluation and spot sample. More such studies with large sample size is required in future to define place in current diagnostic armamentarium in pedantic stone formers.

VPP 22

Retrograde intrarenal surgery for management of stones in congenitally abnormal kidney: single centre experience

Darshan H Shah, Mishra S, Sabnis R, Desai M

Muljibhai Patel Urological Hospital, Nadiad

INTRODUCTION: Since the development of RIRS (retrograde intrarenal surgery) in 1990s, it has been improved dramatically. Its role in urolithiasis is expanding. However there is scarcity of literature on its use for management of stones in congenitally abnormal kidneys. AIM AND OBJECTIVE: To investigate feasibility and efficacy of RIRS in management of stones in congenitally abnormal kidney. MATERIALS AND METHODS: We performed retrospective analysis of patients who underwent RIRS for stones in ectopic/horseshoe/malrotated kidney. Successful stone clearance is defined as stone free state or residual fragment less than 3mm. RESULTS: We analysed data of 25 patients with total stone number of 37. 14 had ectopic kidneys, 5 horseshoe, 5 malrotated and 1 left to right crossed fused ectopia. There were 17 males and 8 females with mean age of 38.2q12.5 years. 15 patients had single while 10 had multiple stones. Mean stone size was 14.7q7.1mm with mean housefield unit 1210.8q237.7 HU. Stone clearance rate was 88%. 18(72%) patients were rendered stone free in first stage, 3(12%) patients required two stage while 1(4%) required three stage for complete clearance. 3 (12%) patients who had failed RIRS due to difficult angulation, underwent Miniperc, supine PCNL and Microperc. Mean operative time was 74q21.2 minutes. 20% had minor (clavian grade I and II) complications. None had major complications. Mean hospital stay was 68.28q19.23 hours. CONCLUSION: RIRS seems to be safe and effective for management of stones in congenitally abnormal kidneys with minimal morbidity and good success rate.

VPP 23

Minimally invasive management of renal calculus disease in anomalous kidneys : Single center experience

Manoj kumar, Aneesh Srivastava, Jatinder Kumar, Sohrab Arora

Sanjay Gandhi Post Graduate Institute Of Medical Sciences, Lucknow

Objective: To assess the feasibility, safety and results of minimally invasive techniques for stone clearance in patients with renal anomalies. Material and methods: A total of 87 moieties in 79 patients with renal anomalies

who underwent procedures for stone clearance between June 2000 and August 2013 were studied retrospectively. This study included 52 men and 27 women. Patients below the age of 12 years were not included in the study. Procedures performed were percutaneous nephrolithotomy (PCNL), laproscopic assisted percutaneous nephrolithotomy (LAPCNL), laproscopic pyelolithotomy, extracorporeal shock wave lithotripsy (ESWL) and stented extracorporeal shock wave lithotripsy (SESWL). All the procedures were done using standard described techniques. For ESWL, patients with stone size more than 1 cm were stented. Operative characteristics, intraoperative and postoperative complications, hospital stay, stone clearance and the number of ancillary procedures were studied in all patients. Results: The mean age of patients was 33.4 years (range 16 to 58 years) and the mean stone size was 24.2 mm (range 10 to 50 mm). A total of 87 moieties were operated upon. PCNL was performed in 43 moieties, LAPCNL in 6, laproscopic pyelolithotomy in 15, ESWL in 14 and stented ESWL in 8 moieties. For PCNL in horse shoe kidney (HSK) superior calyceal puncture was done in 27 and 4 patients required mid posterior calyceal puncture. Complete stone clearance in all PCNL was achieved in 36 out of 43 patients, among these four required relook PCNL and two required postoperative ESWL for residual fragments. All the six patients were having complete staghorn calculus. Stone clearance was complete in all patients who underwent laproscopic pyelolithotomy including two patients with secondary inferior calyceal stones. Stented ESWL was successful in all patients with stone clearance achieved in mean 14 days (range 7 to 21 days) while ESWL achieved stone clearance in mean of 14 days (range 3 to 28 days). Among these two required ureteroscopic removal for stricture persisting for more than 2 weeks. Mean hospital stay for PCNL was 3.2 days (range 3 to 7 days), and LAPCNL was 4.5 days (range 4 to 12 days). Conclusion: Minimal invasive surgery for stone clearance is feasible in patients with anomalous kidneys with an acceptable complication rate.

VPP 24

What determines stone durability during pcnl: a qualitative and quantitative analysis

Haresh G Thummar, Fotima Asqarova, Usama Khater, Rao Mandalapu, Rus Korets and Mantu Gupta

MT Sinai Hospital, St Luke Roosevelt hospital, New York, Columbia UNI, USA

Objective: It has been purported that the fragility of stones during lithotripsy may be predicted by radiologic characteristics on CT scan and is dependent on their biochemical composition. We sought to determine pre-operative, intra-operative and post-operative factors that influence stone durability during percutaneous nephrolithotomy (PCNL). **Methods:** We prospectively reviewed data of the patients that were undergoing PCNL at our Institute by a single surgeon. The characteristics of the stone on CT scan were analyzed for mean attenuation value (MAV-in Hounsfield units), skin to stone distance (SSD), and stone measurements, and the stone volume was computed using ellipsoid formula. During the surgery, the surgeon used 10-point scale to qualitatively assess the hardness of the stone. The number of impulses with the same pneumatic lithotripter device to fragment the stone was counted and documented by a research associate, as was the time it took to fragment the stone and to clear the fragments. Post-operative factors such as perioperative complications and biochemical stone composition were documented. **Results:** A total of 21 patients were included in the study. There were 9 males and 12 females with the mean age of 56.8 (range 39-81). Mean stone volume and MAV were 263 mm³ (range 4.53-964) and 1001.3 HU (range 288.4-1850) respectively. There were 17.8% of patients with uric acid stones, 75.06% mostly mixed with calcium stones (47.56% calcium oxalate monohydrate and calcium oxalate dihydrate, and 27.5% calcium phosphate) and 7.14% matrix stones as well as magnesium ammonium phosphate stones. Mean surgeon score of overall stone hardness was 6.47 (range 2-10). Mean stone score for uric acid stones was 6.3, calcium oxalate and calcium phosphate were 6.75 and 7.46 respectively. Mean impulses per volume and time per volume was 9.66 (range 0.0031-11.08) and 1.08 (range 0.00321-1.008) respectively. The correlation between Hounsfield units and durability (measured by impulses/volume) were significant, as well as the differences between stone compositions (p<0.05). **Conclusions:** We conclude that stone composition and density on CT do correlate with stone durability as measured by impulses per volume to fragment stones.

INVITED ALL ZONAL BEST PAPER PRESENTATIONS

IZBP 01

Predictors of early progression (<12 months) of patients with metastatic adenocarcinoma prostate initiated on Androgen deprivation therapy (adt) – a retrospective Cohort study

Partho Mukherjee

Christian Medical College, Vellore

Introduction and Objective: Androgen deprivation therapy remains the mainstay of treatment of metastatic carcinoma prostate. The duration of response is variable and affected by multiple factors. The objective of this study was to ascertain factors predicting early progression of metastatic adenocarcinoma prostate on ADT. **Methods:** A cohort of patients with metastatic adenocarcinoma prostate who were initiated on ADT from Jan 2002 till December 2013 was selected from the electronic data base for the study. Parameters studied were, age at presentation, histo-pathologic features, serum biochemistry, imaging details, and bone scan reports, if available. Progression was defined as the first recorded rise in prostate specific antigen (PSA) after the nadir value, irrespective of the period of follow up. Patients were divided into two groups arbitrarily based on the time of progression (early < 12 months; late ≥ 12 months). Statistical analysis was done to find the parameters predictive of early progression. **Results:** Out of 177 patients with metastatic carcinoma prostate who underwent castration, 81 had follow up PSA values for more than one year and were included in the analysis. The mean duration of follow up was 36 months. Age <60 years, PSA at presentation >20 ng/ml, Alkaline phosphatase > 150 IU/L and higher (>7) Gleason score at presentation were factors associated with progression within 12 months. A nadir PSA value <1 ng/ml was associated with delay in progression (p value = 0.000). A PSA value of >20 ng/ml, an Alkaline phosphatase of more than 150 IU/L and a Gleason score of more than 7 at presentation correlated to an increased risk of progression in bone metastasis. **Conclusion:** Age less than 60 years at presentation and failure to reach a nadir PSA values of <1ng/ml predictive of early progression.

IZBP 02

Exit strategy following MINIPNL – Prospective Randomized Study

Vinodh Murali

MPUH, Nadiad

Introduction: Since mini percutaneous nephrolithotomy (MPNL) involves small size tract, many prefer to do a tubeless (no nephrostomy) procedure. However most of them insert a double J stent. Some prefer to keep nephrostomy tube & avoid a stent. We decided to do a prospective randomized study between 3 groups – no nephrostomy and no DJ stent, No Nephrostomy with DJ stent & Nephrostomy with no DJ stent. Intraoperative and postoperative parameters were evaluated. **Methods and materials:** After HREC approval, 90 patients who consented for the study underwent MPNL for stone size between 1-2.5 cm renal calculi and were randomized in 3 groups. Group A – No nephrostomy & no DJ stent. (ureteric catheter removed in 24 hrs), Group B – No nephrostomy with double J stent(stent was removed after 10 days), Group C – 14 F nephrostomy, ureteric catheter (both removed in 24 hrs).The foley catheter was removed in all the groups in 24 hours. Those who required multiple tracts, had incomplete clearance intra-op, or had intra-op complications like bleeding, perforation were excluded from the study. Parameters evaluated were – Stone characteristics, post operative visual analogue score, analgesia dose requirements, urinary leak or perinephric collection, fever, stone clearance, fall in hemoglobin & over all hospital stay. **Results:** Mean stone size & location were same in all the groups. VAS pain score in Group A was 1.5 ± 0.9, in Group B -1.9 ± 0.6 & in Group C - 2.3 ± 1.4. (p values: A vs B = 0.014, B vs C= 0.206, A vsC= 0.003).Analgesic requirement was least in Group A as compared to Group B & C. Difference was statistically significant. There was no difference in Hb drop, urine leakage, stone free rate. None had any peri-operative complication in the form of fever,

perinephric collection...etc. Mean hospital stay in Gr A (1.3 ± 0.7days) & in Gr. B (1.2± 0.6 days) was similar but shorter than Gr. C (2.0 ± 1.6, p = 0.025). In Group B, 46.7% patients had significant stent related symptoms affecting quality of life as assessed at 10 days follow up. None required any auxiliary procedure except stent removal in Gr. B. Conclusion: Following uncomplicated miniperc, no nephrostomy & no DJ as exit strategy is safe and efficacious.

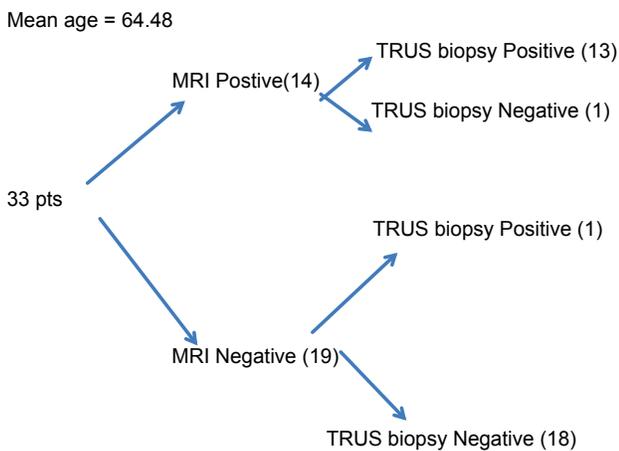
IZBP 03

Prebiopsy Multiparametric MRI of prostate

Cardosa Amanda

Goa Medical College, Goa

Aims: To analyse clinical value of multiparametric prostate MRI prior to TRUS guided biopsy in patients with Sr.PSA 4-10ng/ml&>10ng/ml in diagnosing ca prostate. To study correlation between Diffusion Weighted MRI (DWI), MR Spectroscopy (MRS) and Gleasons score(GS). Material & Methods: 33 patients with Sr. PSA 4 -10ng/ml&>10 ng/ml were analysed between May'2013 and May'2014. DRE & multi parametric prostate MRI with spectroscopy, was done prior to 12 core TRUS guided biopsy. Results:



14/33 had carcinoma prostate of which 13 had positive MRI prior to biopsy [sensitivity - 92% & positive predictive value (PPV) - 92.3%, irrespective of PSA]. Sensitivity and PPV was almost 100% for Sr PSA >10ng/ml, and 87% & 92% respectively for Sr PSA between 4-10ng/ml. Combined T2WI with DWI, irrespective of Sr.PSA, had sensitivity of 87% and specificity of 100%.Sensitivity dropped to 42%with combined T2WI and MRS if Sr PSA was 4-10ng/dl. Of 13MRI positive pts, GS was ≥7 in 7 and ≤6 in 6. Both DWMRI and T2WI positive, increased likelihood of high grade tumour. DWI acquired ADC values decreased with increasing GS. MRS was less sensitive for tumours with GS<6. Discussion: Tsutomu Tamada found 83% sensitivity and 80% specificity in combined MRI prior to biopsy (Sr PSA >4). Joan C et al concluded that combining T2WI and functional sequence (especially DWI) could be adequate for cancer detection. Katsumi et al concluded that positive DWMRI correlated with high malignant potential. Rajakumar Nagrajan et al concluded that DWMRI acquired ADC values could predict tumour aggressiveness. Conclusion: Multiparametric MRI prostate prior to biopsy may help detect Ca prostate in patients with Sr. PSA >4ng/ml, and reduces unnecessary biopsies for patients with Sr.PSA in grey zone of 4-10ng/ml. Positive DWMRI &T2WIMRI findings in pts with Sr. PSA >4ng/ml may suggest tumour of high Gleasons Score.

IZBP 04

Redo surgery after hypospadias repair

Rishi Grover

Surat

MATERIALS AND METHODS: 45 patients aged 15 months to 40 years (mean: 11.3 years), underwent redo surgery after prior surgery for hypospadias. 24 (53%) were for failed repair, 7 (16%) for urethrocutaneous fistula, 7 (16%) for stricture with or without diverticulum, 4 (9%) for chordee, 2 (4%) for buried penis and 1 (2%) for meatal stenosis. The duration to intervention ranged from 4 months to 35 years. 25 (56%)

patients had undergone one surgery, and 20 (44%) had undergone 2 or more procedures previously. Follow up ranged from 6 months to 5 years. RESULTS: In addition to other procedures, 7 (16%) patients underwent staged repair, 7 (16%) fistula repair with or without meatotomy, 9 (20%) underwent a Snodgrass repair while 8 (18%) underwent repair with use of buccal mucosal graft. Of these, 2 (4%) patient had urethral tube necrosis, 3 (7%) had urethrocutaneous fistula and 2 (4%) had meatal regression. CONCLUSION: Redo surgery after hypospadias repair is a challenging task, fraught with complications, and may require a staged approach and application of various reconstructive techniques.

IZBP 05

Role of biochemical markers and histopathological findings in the prediction of regional lymph node metastasis in carcinoma penis

Gupta Nitin, Sarma D, Bagchi PK, Barua SK, TP Rajeev, Barua SJ

Gauhati Medical College and Hospital, Guwahati, Assam

Introduction: Inguinal lymph node metastasis is the most important prognostic factor for survival in patients with squamous cell penile cancer which highlights the need for its prediction. Recently many biochemical markers like C-Reactive Protein(CRP) and Neutrophil to Lymphocyte Ratio(NLR) and histological findings have been reported to predict lymph node metastasis preoperatively. In this retrospective study we have tried to evaluate the association between these markers and regional nodal metastasis in carcinoma penis. Methods: A retrospective study which included 24 penile cancer patients with known preoperative serum CRP, NLR and had undergone penectomy with regional lymphnode dissection were included. Serum CRP, serum NLR, postoperative histopathological finding of lymphovascular invasion (LVI), perineural invasion(PNI) and histological grade in primary tumor were correlated with lymphnode status. Results: Of the 24 patients who had undergone penectomy with lymphadenectomy, 16 were positive and 8 negative for nodal metastasis. Mean preoperative CRP value was 32.44 for lymph node positive patients and 10.86 for lymph node negative patients. NLR was more than 4 in 14(87.5%) lymph node positive patients and only 3(37.5%) lymph node negative patients. LVI, PNI and histological grade 3 were present in 15, 14 and 12 patients for lymph node positive status and only 1, 2 and 1 patients for lymph node negative status respectively. Conclusion: High preoperative CRP and NLR, primary tumor lymphovascular invasion, perineural invasion and histological grade 3 were significantly associated with regional lymph node metastasis and may be used as additional markers to help identify patients with penile cancer who may benefit from inguinal lymph node dissection.

IZBP 06

Value of adrenal mrsa parameters in the determination of adrenal mass characteristics preoperatively

Baishya Debajit, Sarma D, Bagchi PK, Barua SK, TP Rajeev, Baruah SJ

Gauhati Medical College Hospital, Guwahati, Assam

Introduction and objective: Adrenal nodules are frequently encountered on current high-resolution imaging and accurate characterization of such lesion is critical for appropriate patient care. A prospective study to determine the accuracy of magnetic resonance spectroscopy in distinguishing benign and malignant adrenal mass preoperatively and to correlate with the HPE of operated specimen. Cutoff values of 1.20 for the choline-creatinine ratio(92% sensitivity, 96% specificity),0.38 for the choline-lipid ratio(92% sensitivity, 90% specificity), and 2.10 for the lipid-creatinine ratio(45% sensitivity, 100% specificity)enabled adenomas,cyst, myelolipoma and pheochromocytomas to be distinguished from carcinomas & metastases. Method: A prospective study conducted in the Department of Urology, Gauhati Medical College Hospital from September 2013 to August 2014. Solitary adrenal mass > 2 cm included in our study. Non compliant patients, adrenal mass<2 cm, bilateral adrenal mass are excluded from our study. 23 patients with adrenal mass more than 2 cm who fulfilled our inclusion criteria were included in the study. Adrenal masses were examined with 1.5 T MR imaging and point resolved multi voxel 1H MR spectroscopy to measure choline/creatinine, choline/lipid, lipid/creatinine ratio. All patients underwent laparoscopic/open adrenalectomy. HPE was done

in all patients and the ratios were correlated with the HPE report. Results: Metabolic amplitude peak from early eligible voxel were measured and used to calculate the ratios. Postoperatively HPE of the specimen correlated with the choline-creatine, choline-lipid and lipid-creatine ratio. Out of the 23 cases, the ratios significantly correlated with HPE in 6 adrenocortical carcinomas, 2 metastatic lesions, 3 pheochromocytomas, 8 adenomas, 2 adrenal cysts, 2 myelolipomas. Metabolic peak in certain level of frequency range aid to our diagnosis. Conclusion: MR spectroscopy can be used to determine the adrenal masses on the basis of spectral findings for benign adenomas, cyst, carcinomas, pheochromocytomas, myelolipomas and metastasis and it significantly helps in planning the initial management of the cases

IZBP 07

Ileal Ureteral substitution for long ureteric strictures/segment loss by Yang-Monti technique A single centre experience

Syed Sajjad Nazir, Muneer Khan, Sajjad Thakur, Tanveer Qbal Dar, Mufti Ahmed Mehmood, Shoukat Ahmed Geelani

GMC Srinagar and Kidney Hospital Srinagar

Introduction: A new technique for replacing the ureter based on the Yang-Monti principle is introduced to overcome the drawbacks of the classic ileal ureter. **Material and Methods :** Between March 2007 and June 2014 ureteral replacement by ileum was indicated in 9 patients, long or multiple strictures due to tuberculosis (6), retroperitoneal tumor (1) and iatrogenic ureteric injury during ureteroscopic (2). Exclusion criteria included patients with inflammatory bowel syndrome or irradiated bowel or a non functioning renal unit. The technique involved isolation of a 9 cm. ileal segment, which was further subdivided into 3 equal parts. Paramesenteric antimesenteric incision along the longitudinal axis of these segments followed by unfolding resulted in a 18-24 cm. ileal strip. Tubularization of this strip led to the formation of an ileal tube with a suitable caliber. The latter was implanted into the bladder by Lich-Grogier technique. **Results:** No intra-operative or postoperative mortality or significant complications occurred. There were minor complications in the form of urinary leakage that necessitated prolonged ureteric stenting in one patient, superficial wound infection in another one and 2 patients developed treatable urinary tract infection without late harmful effects. During follow up, no excess mucus production or metabolic abnormalities were encountered. All patients had preserved renal function without any evidence of urinary obstruction. **Conclusions:** The reconfigured ileal segment for ureteric substitution is a safe technique with an excellent outcome. It uses short ileal segments for reconstruction of an ileal tube of adequate length and optimal caliber that permits easy antireflux implantation into the bladder so it is not associated with excess mucus production or metabolic abnormalities and offers a durable preservation of renal function without urinary obstruction. **Key words:** ureter, ileum, Ureteric Stricture.

IZBP 08

Single Stage Partial Penile Disassembly Repair In Isolated Male Epispadias Patients: The Functional and Cosmetic Outcome

Ravi Upadhyay, AL Bhat, MC Arya, Vinay Kumar, Rajeev Kumar, Ruchi Mittal

Sardar Patel Medical College, Bikaner

OBJECTIVE: To evaluate the functional and cosmetic outcome of single stage partial penile disassembly repair in isolated male epispadias. **MATERIALS & METHODS:** A retrospective analysis of 43 cases of primary epispadias repair, performed during July 1998 to July 2013 at our institution. Patients were classified on the basis of type of epispadias, urinary incontinence, presence/degree of chordee and torque. Patients with Exstrophy Epispadias complex, secondary repair and total incontinence were excluded. **Surgical technique:** Penile de-gloving with mobilisation of urethral plate from ventral to dorsal aspect with preservation of blood supply at both ends, distally upto the level of mid-glans and proximally upto pubic symphysis with division of penopubic ligament to lengthen the penis and position the urethra ventrally. Tubularisation of urethral plate followed by spongioplasty. Corporoplasty with medial rotation of corporeal

bodies (without any corporotomy) and glanuloplasty with meatoplasty to bring the meatus ventrally. Skin cover with rotation of ventral flaps and z-plasty when required. **RESULTS:** Age of the patients varied from 6 months to 26 years with a mean of 8.9 years. Forty patients (93%) had excellent cosmetic outcome while three patients (7%) had minimal residual chordee/torque but didn't require any surgery in a follow up to 2-10 years. All seven (100%) partially incontinent patients in the study group achieved continence after surgery. None of the patients developed complications like fistula or stricture. **CONCLUSION:** The technique incorporates all the benefits of Cantwell Ransley repair, needs less extensive dissection than total penile disassembly and has an acceptable complication rate.

Podium Session 1: FEMALE UROLOGY AND NEUROVESICAL DYSFUNCTION

POD 01 – 01

Case series of complicated longstanding vesicovaginal fistula

Sudarshan Daga, Mohd Ismail, Sujata Patwardhan

Seth GS Medical College And Kem Hospital Mumbai

INTRODUCTION AND OBJECTIVES: We present a series of 5 complicated, large and neglected VVF. All patients presented with a long standing history of 10 yrs duration associated with small capacity bladder. **MATERIALS AND METHODS:** 5 female patients in age group 30-65 years were included. 4 patients had complicated vesicovaginal fistula with loss of anterior vaginal wall secondary to obstetric hysterectomy and one had vesicovaginal fistula secondary to prolonged labour. All patients were evaluated preoperatively by history, physical examination, local examination serum creatinine, ultrasonography abdomen and intravenous urography (IVU). Cystoscopy and fistula site biopsy was done. Preoperative findings revealed a small contracted bladder in all the six cases due to inability to distend because of large VVF and associated recurrent urinary tract infections. Abdominal VVF repair with augmentation cystoplasty done in all the 5 patients, 15cm distal ileal loop was used for augmentation. One patient needed ileal loop reconstruction of associated anterior vaginal wall defect. Patients followed up at 3 months interval. **RESULTS:** 4 out of 5 patients had successful repair of fistula. One patient developed recurrence of VVF at 3 months follow up and is under evaluation for redo surgery. **CONCLUSION:** Vesicovaginal fistulas are socially debilitating complications of obstetric and gynaecologic procedures. Due to social barriers patient present late and lack of access to surgical treatment. small bowel is a readily available vascular tissue for restoring bladder and vaginal capacity. Augmentation cystoplasty plays a major role to augment the bladder capacity and reconstruct the vagina.

POD 01 – 02

Uroflow nomograms for healthy indian male individuals 15 to 40 years

Naveen Thakur, VP Sabale, SP Kankalia, V Satav, DK Jain, D Mane, D Ghuge

Dr. D. Y. Patil Medical College, Pimpri, Pune

Introduction Uroflowmetry is the objective method of measuring rate of urine flow. It is an easy and non-invasive procedure. Can be repeated easily hence useful for diagnosis, monitoring treatment results, and follow up. We present Indian nomogram for healthy males. **Methods** A total of 400 healthy males between 15 to 40 years of age were included in the study. Exclusion criteria was positive urinary complaints or urological intervention. Readings with more than 150 cc voided volume were included in the study. Uroflow done with gravimetric method. Two uroflow graphs were obtained from an individual on different occasions to avoid individual bias. Flow chart parameters peak flow rate (Q_{max}), average flow rate (Q_{avg}), and voided volume (VV) were analyzed and statistical calculations were used for drawing uroflow nomograms. **Results** In our study the median age was 27.5 years old. The mean voided volume was 400 ± 115 ml. The mean maximum flow rate and average flow rate were 24 ± 9.2 ml/sec and 14.5 ± 6.12 ml/sec, respectively. Q_{max} decreases as the age progresses. Q_{max} values increased with voided volume. **Conclusion** Age in years 15-25 26-40 Median age 20 32 Q_{max} 25.5 ± 9.0 ml/sec 22.5 ± 9.2 ml/sec Q_{avg} 14.5 ± 7.0 ml/sec 13.5 ± 6.12 ml/sec

POD 01 – 03**Chyluria in pregnancy-A decade of experience****Mahmood Khalid, Singh M, Ahsan A, Tiwari R, Kumar Vijoy, Kumar Sanjay, Haque S**

Indira Gandhi Institute of Medical Sciences, Patna

Introduction :- Chyluria i.e. is passage of chyle in urine, giving it milky appearance is common in many parts of India but rare in west. Very few case of chyluria in pregnant female has been reported in literature. Persistence of this condition may have deleterious effects on health of child and mother. In the present study 43 cases of chyluria during pregnancy and their management seen over a period more than 10 years has been presented. **Material and Method:** In the present study done from July 2003 to June 2014, 43 pregnant patients with chyluria were included. Patients after evaluation underwent conservative management and/or sclerotherapy. Follow up was done by observation of urine color, routine examination of urine and test for post prandial chyle in urine up to 3 month after delivery. **Result:** Conservative management by dietary restriction of fat and physical rest was successful in 6 patient, 13 patient improved after first course of sclerotherapy with 10% povidone iodine and 25% dextrose and 19 patients improve after 2nd session. In non responders 3 patients near term underwent cesarean section while 2 patients opted for medical termination of pregnancy at their own will. After sclerotherapy minor complications like clot retention, fever, hematuria, and abdominal pain were observed in small number of patients and managed symptomatically. **Conclusion:** Sclerotherapy for symptomatic relief of chyluria during pregnancy showed high response rate(86.2%) in short term follow up. Sclerotherapy with 10% povidone iodine and 25% dextrose combination has been proved safe and effective during pregnancy. Medical termination of pregnancy and cesarean section(those near term) may be the options in resistant cases not responding to sclerotherapy.

POD 01 – 04**Study of the voiding dysfunction in traumatic spinal cord injury patients with UDS****Kanwar V, Amer B, Awasti N , Khamuckcham S, Meitie S, Akiogram K, Sinam R**

Regional Institute of Medical Sciences, Imphal, Manipur

Objective- To evaluate the urodynamic (UDS) findings in patients with traumatic spinal cord injury (SCI) and the correlation between the findings and the SCI level and to identify those at risk of developing urological sequelae **Material and methods -** The study was conducted in the Dept. of Urology, RIMS, Imphal from November 2012 to July 2014 on 30 patients (age 18-60) with history of traumatic SCI with bladder dysfunction. **Results-** sw All the patients having injury involving micturition centre demonstrated markedly delayed awareness of filling sensation, first desire to void and also decreased compliance with very low voiding pressures. The results were comparable to hypreflexic detrusor activity. The patients having sustained injury above micturition centre demonstrated a typical detrusor hyperreflexia with or without DESD, also with delayed sensation and low compliance. There is no association between level of vertebral injury (either thoracic or lumbar) and findings of the filling cystometry. While DH+DSD were exclusively seen among participants with UMN, there is statistical significance relationship between level of UMN/LMN injury and outcome of Urodynamic pattern. The strongest correlation was among UDS findings and Maximum cystometric capacity along with Strong desire to void and Maximum Detrusor pressure (in filling phase). First desire to void, compliance and Residual volume were moderately correlated. There was no statistical significance relationship between level of vertebral injury and corresponding leak with Involuntary Detrusor Contraction during filling cystometry **Conclusion –** Urodynamic studies are the gold standard for evaluating bladder and sphincter function and for documenting the effectiveness of new drugs or other treatment modalities.

POD 01 – 05**Female urethral reconstruction using dorsal onlay lingual mucosal graft: a single centre experience****Sartaj Wali Khan, Vizier Rathi, Pranab Patnaik, Dipak Kr. Shaw, S. Trivedi, U. S. Dwivedi**

Institute of Medical Sciences, B.H.U. Varanasi

Introduction: urethral strictures are considered uncommon cause of bladder outlet obstruction in females with reported incidence of 4- 13%. Urethral dilatation, the first line treatment is never curative and patients have to remain on repeated dilatation for indefinite period. We have already published our technique & post op results using lingual mucosa in dorsal onlay manner in reconstruction of female urethral strictures. The present study reports long term results of lingual mucosal graft (LMG) urethroplasty in the management of female urethral stricture disease. **Material & methods:** Between 2006 & 2011, LMG urethroplasty was performed on 40 female patients diagnosed as urethral stricture. All the patients had undergone repeated urethral dilatations in the past with incomplete symptomatic relief. Pre-operatively urethral calibration had shown a urethral lumen of <14 Fr. In the majority the cause of stricture was idiopathic. LMG harvested from ventrolateral aspect of tongue was utilized in a dorsal onlay manner for reconstruction. **Results:** All patients showed symptomatic improvement with pre-operative mean Qmax of 7.5 ml/s increasing to a mean of 28.7ml/s at 3 mth follow up. At 3 years mean Qmax was 26.3 ml/s. 3 patients complained of mild stress incontinence post-operatively which was managed conservatively. In 4 patients, recurrent stricture was noted which responded to urethral dilatation. **Conclusion:** LMG urethroplasty is a simple, safe & effective surgical option with good long term results in the management of patients with minimal risk of urinary incontinence & acceptable recurrence rates.

Podium Session 2: PEDIATRIC UROLOGY AND CONGENITAL DISORDERS 1**POD 02 – 01****Extravesical versus Cohen's reimplantation for Vesico ureteric reflux in children****Rohit Muvva, Ramesh Babu, Venkatramanan, Sunil Shroff**

Sri Ramachandra Medical College, Porur, Chennai

Aims: To compare the outcomes of extravesical versus Cohen's reimplantation for vesico ureteric reflux (VUR) in children. **Methods:** Records of all children (n=118) who underwent reimplantation for VUR between 2003 and 2014 were retrospectively analyzed. Children with secondary VUR (PUV, neurogenic bladders, or other underlying abnormalities) were excluded. Those who underwent combined extra and intra vesical reimplantation were excluded. Extravesical reimplantation (n=51) was preferred in younger children with isolated VUR. Cohen's reimplantation (n=67) was preferred in children older than 2 years with VUR, or those with ureterocele/ para ureteric diverticulum/ obstructed refluxing system, that required disconnection of ureter/ tapering of distal ureter/ repair of detrusor defect. Parameters compared were: post op bladder spasms & significant hematuria > 72 hrs, duration of stay and long term complications. **Results:** The mean age at operation was 1.8 yr (0.4) for extravesical while 5.5 (0.5) for Cohen's reimplantation. Post op bladder spasms and hematuria were significantly lower (p=0.01) at 12/51 for extravesical versus 31/67 for Cohen's reimplantation. The post op stay was significantly lower (p=0.01) at 4.5 (1.5) days for extravesical versus 6.5 (0.5) days for Cohen's reimplantation. There were no post operative complications or failure in both the groups. Those who under went extravesical reimplantation for bilateral VUR (32/51) did not encounter any retention as described in the literature. **Conclusions:** Extravesical reimplantation has less post operative discomfort and hospital stay compared to Cohen's reimplantation. It has the advantage of keeping a straight access to the upper tract for future instrumentation.

POD 02 – 02**Technical issues in upper polar heminephrectomy in duplex kidney : our experience with 12 cases****Choudhuri S., Mishra JJ. Pattanaik A. Swain S. Mohanty PK., Singh GP. Hota D.**

S.C.B Medical College & Hospital, Cuttack

Introduction Ipsilateral upper polar heminephrectomy in duplex kidney with poorly functioning upper pole moiety either laparoscopic ally or open

surgery presents with varied complications. It may present as urinoma due to urinary fistula, hematoma due to hemorrhage, cysts in the resected area or atrophy or loss of function of remnant moiety due ischemia. It needs delicate handling of vessels around the upper pole and hilum and carefully removing out the nonfunctional upper pole. We present our experience on technical issues about upper polar nephrectomy in 12 cases of duplex kidney those who detected postnatal. Material & Methods From 2010 to 2013, 12 patients with duplex system anomalies with poorly functioning upper pole moiety undergone open or laparoscopic heminephrectomy. All of them undergone thorough clinical examination, routine investigations with DTPA scan. We did upper polar heminephrectomy with excision of as much as ureter below. Patients characteristics, presentations, operative techniques and results were collected retrospectively. Results Mean operative time for laparoscopic surgery was 206 minutes and for open surgery 255 minutes. No major intraoperative or post operative complications. Mean hospital stay for open surgery and laparoscopic surgery were 6.4 days and 3.4 days respectively. After 48 months of follow up there were no similar symptoms or UTIs. Conclusion Whether open or laparoscopic upper polar heminephrectomy in duplex with poorly functioning upper moiety, careful dissection around the upper pole with perfect identification of vessels and plane of dissection can prevent from disastrous complications.

POD 02 – 03

Metabolic Evaluation of children with urolithiasis

Vijaya Bhaskar Reddy, V.Surya Prakash, Vijaya Kumar, Venu, Amit Kumar, Sankar, Srikanth

Narayana Medical College, Nellore

INTRODUCTION AND OBJECTIVE: Urolithiasis in pediatric age group is an important cause of morbidity. Children with urolithiasis have high chance of recurrent stone formation. A thorough risk assessment and metabolic evaluation should be performed to identify children at risk for recurrence and to identify specific metabolic derangement. **MATERIALS AND METHODS:** Between August 2012 and August 2014, children upto age of 15 yrs who presented with urolithiasis are included in the study. This is an observational study. Consecutive children with renal stones were prospectively evaluated with relevant history, clinical examination, urine and serum testing. Stone analysis and 24hr urinary lithorisk profile done. Data analysis: All data collected was entered in the case record form and excel sheet was prepared. Data is expressed as mean, standard deviation and percentages using SPSS software. **RESULTS:** 39 patients were included in the study (8 girls, 31 boys). Age ranges from 8 months to 15 years. All patients had normal serum calcium, phosphorus and uric acid levels. 29/39 patients underwent stone analysis. Calcium oxalate was major composition in 17 patients (17/29). Uric acid (3/29), struvite (3/29), ammonium urate and silicon oxide (a rare variant) are seen in 2 patients each as a major composition. 24 hours Lithorisk profile was done in 28 patients. 20 patients underwent both stone analysis and lithorisk profile. 21/29 had hyperuricosuria, 18/29 had hypercalciuria, 16/29 had hypernatruria, 16/29 had hyperphosphaturia, 19/29 had hyperoxaluria. Urine Ca/ Cr ratio Values exceeding 0.20 are found in 20/29 patients. **CONCLUSION:** A metabolic abnormality can be identified in 90% of cases of urolithiasis. Hyperuricosuria is found to most common metabolic abnormality found in our patients. Most stones are calcium based. Because of the prevalence of metabolic risk factors and the significant risk of recurrence in this population, all children require a complete evaluation with metabolic workup. Treatment protocols for each patient are tailored individually according to the metabolic evaluation findings.

POD 02 – 04

Laparoscopic Extravesical Detrusorraphy: A Minimally Invasive Treatment Option for Vesicoureteral Reflux – A Single Centre Experience.

Pathade Amey D, Javali Tarun, Nagaraj H.K.

M.S.Ramaiah Medical College and Hospital, Bangalore

Objective To share our experience of laparoscopic extravesical detrusorraphy, highlight our technical modification of intraoperative minimal "atraumatic" ureteric handling and report our results. **Methods** This was a retrospective chart review of 76 toilet trained children (98 refluxing units), in the age group of 3-16 years, with Grade I-IV reflux,

who underwent laparoscopic detrusorraphy from June 2006 to January 2014. Ureteric catheter is inserted into the refluxing ureter and is tied to the Foleys to drain into a common bag. A three port technique is used. During ureteral dissection, a vascular sling in the form of a Rumel tourniquet is used for atraumatic handling of the ureter. Detrusor tunnel is created with hook electrocautery. A stay suture is later passed through the abdominal wall and slings around the dissected ureter, which helps in holding the ureter approximated against the mucosal trough during detrusorraphy. Detrusor fibres are approximated with 5-0 Vicryl. No drain is placed and the Foley and ureteric catheter(s) are removed after 24 hours. Results Surgery was successful in 97.9% of the refluxing units (96/98). The mean duration of hospital stay was 1.5 +/- 1.7 days. There was one case of urinary retention that was managed with temporary recatheterization. There were no cases of ureteral ischaemia, ureteral obstruction, hematuria or bladder spasms. **Conclusion** Laparoscopic extravesical detrusorraphy provides a minimally invasive treatment option for treatment of unilateral/bilateral grade I to IV vesicoureteral reflux with success rate comparable to open surgery. Our technical modification prevents ureteral ischemia and ureteral obstruction.

POD 02 – 05

Functional outcomes of early versus delayed pyeloplasty in prenatally diagnosed PUJ obstruction.

V R Rathish, Ramesh Babu, Venkatramanan, Sunil Shroff

Sri Ramachandra Medical College, Chennai

Objective: To compare the functional outcomes of early versus delayed pyeloplasty in those with PUJ obstruction diagnosed prenatally. **Methods:** Between 2004 and 2013, a total of 126 children with SFU grade 3-4, with obstructive pattern on radio nuclide scan were included. Those with severely impaired SRF (<20%) or supra normal SRF (>50%), gross PUJ obstruction with palpable mass, single kidney status, bilateral disease and other urological anomalies were excluded. Group I underwent early pyeloplasty; Group II underwent initial conservative management, with 3 monthly USG and nuclear scans and pyeloplasty whenever there was deterioration of > 10% in SRF, or symptoms, during the follow-up. **Results:** The mean age at surgery was 2.8 months in group I (n=62) while 12.5 months in group II (n=64). In group I, the initial mean SRF was 34.1 (6.4) and there was significant improvement (p=0.01) to 37.2 (7.1) at 1-year follow up after surgery. In group II, the mean SRF was 35.9 (5.7) initially and there was a deterioration to 32.6 (5.5) before surgery. At 1-year follow up, there was a marginal improvement to 33.5 (5.6), however it was significantly lower compared to the initial SRF (p=0.01). Compared to initial function, at 1-year follow up, SRF improved in 17/62 (27.4%) patients in group I while only 7/64 (10.9%) in group II (p=0.03). Significantly less patients had deterioration in final SRF at 8/62 (12.9%) in group I compared to 22/64 (34.4%) in group II (p=0.03). Initial SRF did not correlate with final functional outcome in both the groups. **Conclusions:** Irrespective of initial SRF, early pyeloplasty in prenatally diagnosed SFU grade 3-4 PUJ obstruction leads to significant improvement of SRF, while delayed pyeloplasty leads to a marginal but, significant loss.

POD 02 – 06

Role of Uroflow with Electromyography in evaluation of Children with non neurogenic voiding dysfunction: A prospective study

Vinu Gopinath, Ramesh Babu, Venkatramanan, Sunil Shroff

Sri Ramachandra Medical College, Chennai

Aims: Conventional urodynamic study (UDS) is considered invasive, while uroflowmetry (UF) inadequate, in the evaluation of children with voiding dysfunction. The aims of this study were to identify role of uroflow with electromyography (UFEMG) in this group. **Methods:** A cohort of 121 children (Age 5-12 yrs; M: F= 2:3) with symptoms of voiding dysfunction underwent a detailed voiding history and clinical assessment. Those with evidence of neurological abnormality, obstructive uropathy or active urinary tract infection were not included. They were prospectively studied using UFEMG first followed by UDS on the same day. **Results:** A total of 76 (63%) children had abnormality on UFEMG while only 12 (10%) had abnormality on UDS. UFEMG was significantly superior in picking up abnormality (p=0.01). Three types of UFEMG abnormalities

were identified: 1. Dysfunctional voiding (prolonged staccato trace with active pelvic floor and normal voided volume: n= 42) 2. Idiopathic detrusor overactivity (shortened trace with quiet/active pelvic floor and reduced voided volume: n= 16) 3. Detrusor underutilization syndrome (prolonged flat trace with quiet pelvic floor and large voided volume; n=18). Conclusions: UFEMG is ideal non invasive test in children with voiding dysfunction. It helps to identify the different patterns and the appropriate treatment modality.

Podium Session 3: PEDIATRIC UROLOGY AND CONGENITAL DISORDERS 2

POD 03 – 01

Management of Pediatric Urolithiasis with Renal Failure: Does age matter?

Jayesh Modi, Pranjal Modi, Bipinchandra Pal, Suresh Kumar, Ramya Nagarajan, Yusuf Saifee

Institute of Kidney Diseases and Research Centre, Institute of Transplantation Sciences, Ahmedabad

Introduction: Urolithiasis associated with renal failure is one of the most important causes of pediatric end stage renal disease in developing countries. Our aim was to evaluate clinical characteristics of pediatric patients and compare the renal recoverability in two different age groups, viz. children \leq 6 years versus 6-12 years. **Methods:** We divided patients presented with creatinine (\geq 2 mg/dl) and/or serum potassium level ($>$ 6 mmol/L) into two groups, group A consisted of children \leq 6 years of age, while group B consisted of children between 6-12 years of age. Out of all 130 subjects, those who did not achieve normal cut off creatinine value after three weeks of urinary diversion were included in the study. The cut off value for normal serum creatinine was kept as 0.7 mg/dl for group A while 1.0 mg/dl for group B. Clinical, demographical data and relative difference in the creatinine after treatment were compared in both the groups. **Results:** The difference in serum creatinine (from initial to nadir) value was compared, which is suggestive of better outcome of renal function in group A. (p=0.035) **Conclusion:** Urgent medical management along with urinary diversion is the key to achieving favorable outcomes in pediatric urolithiasis with renal failure. Children \leq 6 years of age have better renal recovery than older children with $>$ 6 yrs of age. Simultaneous efforts of both the pediatric urology and nephrology teams under one roof is required for better outcomes.

POD 03 – 02

Urodynamic profile in Posterior Urethral Valve patients following fulguration : does age at fulguration matter?

Ashwin Mallya, VS Karthikeyan, Ali Poonawala, CS Ratkal

Institute of Nephrourology, Bangalore

Introduction and objective: Children with Posterior Urethral Valve (PUV) have urinary bladder (UB) dysfunction even after valve fulguration (VF). We sought to identify whether age at VF and time elapsed since VF contributed to UB dysfunction using urodynamic studies (UDS). **Methods:** 51 boys post VF for PUV were referred for UDS between January 2008-July 2014; 39 included for analysis. Classification into Groups A and B ($<$ 2 or \geq 2 years at VF) and sub-classified into A1/A2 and B1/B2 depending on time period since VF \leq 4 years or $>$ 4 years. **Results:** Median (q IQR) ages at UDS and VF were 9 q 9 years and 21 q 12 months. Median (q IQR) time elapsed between VF and UDS was 48 q 99 months. 57% of children had low bladder capacity (BC) for age and 67% had reduced compliance, detrusor overactivity and leak in 38.5% and 15.4% children respectively. Mean (q SD) Qmax and Pdet Qmax was 9.35 q 6.21 ml/s and 43.68 q 31.13 cm water respectively. Twenty five percent of patients had hypocontractile detrusor at voiding. Considering all filling and voiding parameters, statistically significant decrease was found in compliance in group B vs group A, and in BC and compliance in group A2 vs A1. **Conclusions:** Majority of the patient cohort had low BC for age and poor compliance and 25% had hypo contractile detrusor demonstrating deterioration despite fulguration. Patients with fulguration $<$ 2 years of age and time period elapsed \leq 4yrs since fulguration had better bladder function than others.

POD 03 – 03

Pelvic fracture urethral distraction defect in paediatric patients-Is management and outcome different from adult patients? Our experience

Jhanwar Ankur, Sankhwar Satyanarayan, Singh Manmeet, Singh Vishwajeet, Singh Bhupendra Pal, Goel Apul, Sharma Pradeep

KG MU Lucknow

Introduction and objective: Urethroplasty considered as the optimum surgical procedure for urethral stricture. Management of pelvic fracture urethral distraction defect in pediatric group is difficult tasks in urologic practice as it is different from adult. It was believed that anastomotic urethroplasty for PFUDD in children is technically much more difficult. **Objective:** is to evaluate the long-term outcomes of anastomotic urethroplasty for pelvic fracture urethral distraction defect in boys ($<$ 18 yrs) patients. **Method:** Retrospective study of 37 patients from Jan 2011 – Dec 2013. Patients $<$ 18 years with pelvic fracture urethral distraction defect were included. Surgery done with same principle as in adults. Inverted Y-shaped perineal incision with the patient in an exaggerated lithotomy position were used. Preoperative and post operative data analysed. **Results:** Mean age was 13.8 (7-18) years. Mean estimated radiographic stricture length was 2.3 (1-5) cm. All patients presented with a suprapubic cystostomy tube. Inferior pubectomy done in 6 patients (16.21%). All surgeries done by transperineal route. Repair was successful in 33 of 37 (89%) patients. All treatment failures were at the anastomotic site. Failed repairs were successfully managed endoscopically in 2 and by redo perineal anastomotic repair in 2 patients. All boys are continent till last follow-up. **Conclusion:** Success rate of perineal anastomotic urethroplasty for PFUDD in pediatric age group is excellent in experienced hands. This approach is safe and effective. Outcomes are similar with the adults patients.

POD 03 – 04

Augmentation cystoplasty in paediatric age group: Our experience

Khurshid Ahmed, Chally, R., Azeez, A., Mohanan, K., Chally, P.

Baby Memorial Hospital, Kozhikode

INTRODUCTION: Neurogenic bladder (NB) and Posterior urethral valve (PUV) patients are poorly cared for in many of the instances. Quality of life can be improved if they are detected sufficiently early before renal deterioration occurs. **OBJECTIVE:** To analyze the 1) pre and post operative renal parameters, 2) to assess the post operative complications and 3) to assess the compliance and, patient and parental acceptance. **MATERIALS AND METHODS:** Fourteen patients in the paediatric age group underwent Augmentation Cystoplasty between August 2010 and July 2014 and data were recorded prospectively in our registry. Patients were followed up with Renal function test, Ultrasonography (USG) of KUB and Cystometry wherever it was found necessary and with Quality of life Questionnaire. **RESULTS:** Of the 14 cases of augmentation cystoplasty 6 patients had NB, 5 PUV, 2 Ectopia vesicae and one had a small underdeveloped bladder because of single kidney with ectopic ureter. Renal parameters were improved in all but one patient of PUV who needed end ureterostomy due to recurrent infection. Two patients had stenosis of the Mitrofanoff and one had subacute intestinal obstruction in the follow up period. Augmentation cystoplasty was taken well by both the patients and their parents as well, with improvement in the Quality of life. **CONCLUSION:** Augmentation cystoplasty is well accepted and it improved the Quality of Life in our patients. In our short term follow up there is no major complication related to urinary absorption or mucus production.

POD 03 – 05

Early v/s delayed presentation of posterior urethral valves: consequences and outcome of vesico-ureteric reflux

Sharma Amit, Shaikh Irfan, Chaudhary Radhyeshyam, Andankar Mukund, Pathak Hemant

TNMC and BYL Nair Hospital, Mumbai

INTRODUCTION: Prolonged & unrelieved lower urinary tract obstruction

leads to back pressure effects on the kidneys resulting in obstructive uropathy with renal impairment and may lead to chronic renal failure. Early presentation enables early diagnosis and intervention which reduces the incidence of VUR. MATERIALS AND METHODS: A retrospective study (2010 to 2014) was conducted and data of total 30 patients of Posterior Urethral Valves was analyzed with respect to the age and pattern of presentation and age at primary fulguration. The outcomes of Vesico-ureteric Reflux (VUR) were then compared between early fulguration group (fulgurated in infancy) and late fulguration group. RESULTS: The mean age of presentation was 1 to 5 years. Thirteen patients presented in infancy and the rest 17 patients presented later. The most common presenting symptoms were Urinary Tract Infection (43%) and Voiding difficulties (33%). Thirteen patients (43%) got their PUV fulgurated in infancy and the rest 17 (56.6%) got them fulgurated later. Vesico-ureteric Reflux was seen in 6 patients of Early Fulguration Group (46%) out of which 3 were unilateral and 3 were bilateral. In the Late Fulguration Group, 9 patients had VUR (53%) out of which 3 were unilateral and 6 were bilateral. Decrease in grade of VUR occurred in 2 out of total 6 patients (33.3%) of Early Fulguration Group but none in the Late Fulguration Group. Complete resolution of VUR occurred in 3 out of 6 patients in Early Fulguration Group (50%) but none in Late Fulguration Group. CONCLUSION: Though there is delayed presentation of patients with PUV, early fulguration helps in preserving the renal function and also helps in decreasing or resolution of the VUR. Efforts at improving awareness and early diagnosis among the health team should be made to stem the tide.

POD 03 – 06

Concealed hypospadias/megameatus intact prepuce variant: need for surgical mangement

Upadhyay Ravi, Bhat M, Bhat AL, Mittal R, Saxena G, Arya MC

SPMC, Bikaner

Objectives Hypospadias is usually identified at birth due to the deficient ventral prepuce but less commonly when the prepuce is intact the hypospadias remains concealed. Recognizing this condition, especially in regions where circumcision is common, is technically challenging and often missed by the inexperienced clinician. It may also go unnoticed or ignored by the patient and the parents. Controversy still continues whether to operate these patients or not. The purpose of the study is to discuss the need for the surgical management of these cases. Methods A retrospective study regarding surgical management of 9 cases of concealed hypospadias during 1996 to June 2014 was performed. Surgery was individualized according to the need of the patient and location of meatus which was divided into glanular, coronal and distal penile. Results Glanular, subcoronal and distal penile hypospadias were seen in two, three and four patients respectively. The age of patients varied from 5 – 24 years (average – 17.6 years). TIP with spongioplasty was performed in all seven patients with subcoronal and distal penile variety. Glanular approximation and frenuloplasty was done in one patient each of the glanular variant. Preputial reconstruction was done in all the patients. None of the patients had any complication in a follow up period from 6 months to 5 years. Conclusion Recognition and correction of this anomaly in the era of increased cosmetic awareness is justified due to excellent results obtained with TIP and spongioplasty because of availability of wide urethral plate and well developed spongiosum in these patients.

Podium Session 4: LAPAROSCOPIC UROLOGY

POD 04 – 01

Laparoscopic Assisted Mini Percutaneous Nephrolithotomy(MPCNL) in Ectopic Pelvic Kidney

Ashish Verma, Nischith D'Souza, Mujeeburahiman, Altaf Khan, Avinash Rai

Yenepoya Medical College Hospital, Mangalore

The treatment of renal lithiasis has undergone a great advance with adventment of extracorporeal shock wave lithotripsy (ESWL) and endourological procedures like percutaneous nephrostolithotomy (PCNL), ureterorenoscopy (URS), etc. The presence of anatomical anomalies like ectopic kidney imposes limitations to such therapeutic procedures through PCNL, URS and ESWL. We report here a case series of nine patients who presented to us with a complaint of abdominal pain. Their workup showed a pelvic kidney with mean stone size of 2cm. All had previous failed ESWL

of the pelvic kidney stone. We describe the successful management through Laparoscopic assisted Mini PCNL with LASER.

POD 04 – 02

Laparoscopic parapelvic renal cyst deroofing – use of retrograde instillation of methylene blue

Gulia AK, Kumar A, Chauhan U, Dassi V

Fortis & Max Hospital, Delhi

Introduction Widespread use of ultrasonography of the abdomen has resulted in the detection of a large number of renal cysts. Most of these are simple renal cysts, which do not need any further evaluation or follow up unless symptomatic. One of the complication of parapelvic cyst deroofing is urine leakage. Here we show how it can be prevented. Material & Methods From June 2006 to June 2014, 15 parapelvic renal simple cysts were deroofed laparoscopically. A CECT abdomen done to distinguish accurately whether it was simple renal cysts or a complex renal cyst, which might harbour malignancy. The renal cysts were approached transperitoneally. Retrograde instillation of methylene blue was done in all cases to outline pelvicalyceal system. The cysts were punctured with a needle to aspirate clear fluid and the anterior cyst walls were excised. The remaining cyst walls were inspected to ensure absence of any lesion. Results Mean operative time was 40± 12 minutes. There were no complications. Cytology of the aspirated cyst fluid showed no malignant cells. The histology of the excised cyst wall was consistent with a simple renal cyst. Mean hospital stay was 3±1 days. Conclusion Retrograde instillation of methylene blue during laparoscopic deroofing of parapelvic renal cysts increases the safety of procedure.

POD 04 – 03

Retroperitoneoscopic pyeloplasty for UPJO: A Single centre experience

Jhanwar Anur, Singh Vishwajeet, Sankhwar Satyanarayan, Kumar Manoj, Singh Bhupendra, Goel Apul, Sinha Rahul Janak

KGMU Lucknow

Retroperitoneoscopic pyeloplasty for UPJO: A Single centre experience Introduction Retroperitoneoscopic approach to pyeloplasty was first reported by Janetschek et al in 1996. Minimal invasive approach with outcomes similar to open and transperitoneal route. Objective To present our experience in retroperitoneoscopic pyeloplasty in terms of objective and subjective outcomes. Material and Method Retrospective data of 35 patients who underwent Anderson Hynes dismembered retroperitoneoscopic pyeloplasty for UPJO from Jan 2011 to Dec 2013 were analysed. Preoperative data (routine blood investigations, USG KUB, Intravenous Urography, diuretic technetium-99m-ethylenediethylenetriamine (EC) renal scan was done in all and contrast-enhanced computerized tomography KUB if needed. Postoperatively visual analog scale (VAS) for rating pain was recorded on the first and second postoperative days and 3 months after surgery. The DJ stent was removed after 6 weeks. Complications were recorded and graded using Dindo modified clavien classification. Objective parameters were evaluated by EC renal scan, serum creatinine and USG KUB performed at follow-up visits. Results: The VAS score was (3.1 on day 1 & 1.4 on day 2) and the diclofenac requirements (183.5 mg). The hospital stay (4.6 days). Success rate was found to be 91.5%. Two patients (5.7%) required conversion. Complications in 5 (14.2%) patients. Significant improvement in pain score and drainage pattern on renal scan with decrease in hydronephrosis on follow up ultrasound evaluation. Conclusion Retroperitoneoscopic pyeloplasty is safe and effective minimal invasive approach for the management of UPJO. Results similar with open and transperitoneal approach but relatively need a steep learning curve.

POD 04 – 04

Video endoscopic inguinal lymph node dissection versus open inguinal lymph node dissection for carcinoma penis: a comparison of outcomes study

Jha.A.K, Tomar.V, Yadav.S.S, Priyadarshi.S, Vyas.N, Aggarwal.N

S.M.S. Medical college Jaipur

INTRODUCTION AND OBJECTIVES: The presence and extent of inguinal lymph node metastasis are the most important prognostic factors for

survival in patients with carcinoma penis. Regional lymphadenectomy can still offer high cure rates in the face of positive nodes in carcinoma penis but at the cost of considerable morbidity. The aim of this study is to compare videoendoscopic inguinal lymph node dissection (VEIL) with traditional open inguinal lymphadenectomy to know if this relatively new procedure can help reduce the morbidity of the lymphadenectomy while still maintaining oncological efficacy. **METHODS:** A total of twelve patients with a diagnosis of squamous cell carcinoma of penis were selected for inguinal lymphadenectomy. VEIL was performed in 10 patients (10 limbs) while open inguinal lymphadenectomy was performed in 12 patients (14 limbs). Intraoperative, postoperative and oncological outcomes were analysed. **RESULTS:** The mean operative time was 159.58 minutes for VEIL and 98 minutes for the open procedure. Duration of hospital stay was 4 - 5 days for VEIL and 7 - 8 days for open procedure. The total number of lymph nodes removed and the lymph node positivity rate was similar for both groups. Average duration till drain removal was 4 days for VEIL and 7 days for the open procedure. There were no recurrences detected during follow up. **CONCLUSIONS:** The results of this study show that VEIL is a promising procedure for staging and treatment of inguinal lymph nodes that can reduce the morbidity of the procedure while still maintaining the oncological outcomes. Definition of its actual role in the therapeutic armamentarium may require further studies.

POD 04 – 05

Retroperitoneoscopic simple nephrectomy for benign renal disease: a single centre experience

Patodia Madhusudan, Singh Vishvajeet, Sharma Pradeep, Sankhwar Satyanarayan, Kumar Manoj, Sinha Rahul Janak, Goel Apul

GMU, Lucknow

Introduction Laparoscopic nephrectomy minimizes morbidity of open surgery and now standard of care for nephrectomy. Retroperitoneoscopic approach had advantages of direct access to renal artery and avoidance of bowel handling. **Materials and methods** A total of 42 patients were enrolled in this prospective study from January 2009 to March 2014. Data were analysed regarding indication of nephrectomy, operative time, analgesic requirement, blood loss, days to oral intake, days to drain removal, hospital stay, days to normal activities, complication and conversion to open. **Results** A total of 42 patients underwent RPN. Out of these, 20 patients were of PUJO, 18 of calculus disease, 2 patients of each chronic pyelonephritis and tubercular kidney. In this study mean operative time was 120.4 minutes, mean tramadol requirement was 132.8 mg, mean blood loss was 86.8 ml, mean days to oral intake was 1.14 days, mean days to drain removal was 2.6 days, mean hospital stay was 3.78 days, mean time to normal activities was 9.46 days, complication rate was 9.52% and conversion to open was in 3 cases. Our results were comparable in all parameters with previous published series. **Conclusion** With increase in experience, retroperitoneoscopy is a safe and standardized approach. It provides quicker renal hilar control, less total operative time, lower pain scores, early convalescence and return to routine activities but relatively a more difficult procedure with steeper learning curve.

POD 04 – 06

Robotic assisted radical cystectomy : initial experience of 11 cases

Kale N, Modi P, Pal B , Bhandari N

Institute of Kidney Diseases & Research Centre , Ahmedabad

Introduction & Objective: Radical cystectomy is the gold standard for treatment of muscle invasive transitional cell carcinoma of bladder. Robotic Assisted Radical Cystectomy [RARC] was recently started at our institution. We aim to study the intraoperative and early postoperative parameters after RARC. **Methods:** this study was conducted prospectively between March 2013 to June 2014. 11 cases of muscle invasive TCC of bladder underwent RARC. Five parameters were studied i.e. estimated blood loss [EBL], operative time [OT], time to bowel movement [TBM], days of parenteral analgesia [DPA] & length of stay [LOS]. **Results :** 11 patients underwent RARC out of which there were 5 females & 6 males. the mean age was 62.6 yrs [51y- 78y]. the mean EBL was 759.1ml [200ml – 1400ml]. the mean operative time was 492.4 mins [358 – 595 mins] . the mean

TBM was 3.1 days [2 – 6 days]. The mean DPA was 3.4 days [2 – 6 days]. the average LOS was 11.1 days [5- 25 days]. One patient underwent exploratory laparotomy for small bowel obstruction & one patient underwent B/L PCN diversion for urinary leak from vaginal vault. Both complications were successfully managed and patient discharged subsequently. Two patients developed metastatic disease on followup. **Conclusions:** our initial experience reveals that RARC can be conducted safely with potential benefits of minimal access approach like decreased postoperative pain and decreased length of stay.

Podium Session 5: BASIC SCIENCES AND MISCELLANEOUS 1

POD 05 – 01

Nuances in renal morphometry - The Indian scenario

Krishnamoorthy H, Rathore RS, Mehta NH, Pillai BS, John RP, Sam MP, Upendran B

Lourdes Hospital, Kochi

Introduction and objectives: There is need to develop specific ethnic population nomograms in India to provide better accuracy of renal and ureteric measurements. **Objectives** of our study were: (1) To establish a normal range of values for kidney dimensions and ureteral length in normal Indian population (2) To find out correlation of renal volumes with split renal functions and BMI **Methodology:** 152 patients undergoing CECT scans in our hospital from June 2012 to August 2014 were included. Patients with urological diseases were excluded. Renal and ureteric dimensions were assessed by CT images. Split renal function of each kidney was assessed in a subset of patients (voluntary renal donors) by DTPA scan. Mean renal dimensions, volume (calculated by ellipsoid formula) and ureteral length were compared to data in standard published literature. Mean volume of kidney was correlated with GFR and BMI of respective patients. Pearson's correlation coefficient test was done to assess statistical significance. **Results:** Out of 152 patients 50 were voluntary renal donors. Mean length, width, thickness and volume of left kidney were 11.0 ± 1.21 cm, 5.21 ± 0.75 cm, 4.69 ± 0.78 cm and 140.61 ± 38 respectively and those for right kidney were 10.88 ± 1.12 cm, 5.13 ± 0.73 cm, 4.73 ± 0.90 cm and 144.18 ± 31.98 ml. Mean length of left ureter was 23.51 ± 1.48 cm and that of right ureter was 23.24 ± 1.93 cm. Statistically volume of kidney did not correlate with split GFR (p > 0.11) and BMI (p > 0.09). **Conclusion:** Renal dimensions in Indian population are different from that given in published literature. Mean volume of right kidney was higher than left kidney. Mean lengths of ureters were less than the mean values given in the published data. Volume of the kidney did not correlate with GFR and BMI of the patient.

POD 05 – 02

Prevalence of renal vasculature anomalies in asymptomatic healthy population

Kumar Vikas, Nair Ashiah, Thapman Sam, Shukla Shailendra, Kumar Abhinav, Sharma Vivek, S Vasudevan

Govt Medical College Trivandrum

INTRODUCTION: Knowledge of Renal Vascular variations is important in various urological procedures as Renal Transplantation, Uroradiological procedures, Renal Trauma, Hydronephrosis, etc. Renal vascular anomalies may determine the choice of kidney in renal transplant and may disqualify a potential donor in spite of having normal renal function. **AIM & OBJECTIVES:** To determine the variety and prevalence of incidental renal vasculature and renal anomalies present by CT angiography in asymptomatic healthy population, the potential living kidney donors. **MATERIALS AND METHODS:** All patients presenting at Department of Urology, MCH Trivandrum, as potential living donors underwent CT Angiography using standard protocol. The study is currently in progress. 72 donors have been recruited for the study till now. **RESULTS:** Donor age ranged from 35 -55 years. Mean age group of study population is 44.06 yrs. The commonest vasculature anomaly found, was the presence of double renal arteries in 26.38% of cases, being L>R (27.78% vs 25.0%) followed by Prehilar branching in 6.94% of cases (R>L). Venous variation was less common compared to arteries (4.16% vs 26.38%). The simplest

vascular pedicle namely single renal vessels bilaterally were demonstrated in 52.78% cases. DISCUSSION: Incidental detection of vascular anomaly is common in asymptomatic population. Prevalence of these anomalies varies among various ethnic groups, yet no Indian study is available till today. This is a noble attempt to find out the prevalence of vascular anomalies in our population. Further larger studies are needed to know its clinical relevance.

POD 05 – 03

A prospective comparative study of outcome of early endoscopic intervention versus prolonged medical management in obstructive Renal Papillary necrosis

Smaranjit chatterjee, Swamy S, Prasad KP, Rama Raju K, Raof MA, Younis B

Care Hospitals, Banjara Hills Hyderabad

Introduction: Renal papillary necrosis associated Acute Pyelonephritis is a serious infection of the kidneys. This condition is most commonly associated with uncontrolled Diabetes Melitus. The sequestered necrosed renal papilla often blocks the collecting system and ureter leading to fulminant infection and septicaemia. A high index of suspicion, prompt diagnosis and intervention may change patient final outcome dramatically. In this study we tried to analyse role of early endoscopic intervention in final outcome of these critically sick patients. **Material and Methods:** In this study we analysed a total of forty cases of Diabetes associated Renal papillary necrosis and secondary acute pyelonephritis cases admitted in our institute over a period of one and half years. All patients were seriously ill and were symptomatic of fever with chills, flank pain with or without deranged renal function and poorly controlled Diabetes. Majority of the patients were admitted in Medical Intensive care Units under Nephrologist or Physician care. As per protocol of this study all patients after initial hemodynamic stabilisation underwent Ultrasonography of the Abdomen, Complete Urine examination and Culture and blood Biochemistry including Culture. If ultrasonography showed dilatation of pelvicalyceal system and ureter on one or both sides a request of CT KUB region with or without contrast was made to confirm the diagnosis and rule out calculus disease. This also had added advantage of picking up calcified papillae if missed on USG. All patients were started on broad spectrum antibiotics. Patient family counselling was done by a medical board comprising of Urologist, Nephrologist/treating physician. Counselling included likely benefit of endoscopic intervention. But sixteen patient's family members did not give consent for endoscopic procedures. These patients were managed conservatively with broad spectrum antibiotics and other supportive measures. These sixteen patients were used as control. Endoscopic interventions were performed in willing patients only after medical stabilisation and minimum 24hrs intravenous antibiotic treatment. Endoscopic interventions comprised of Cystoscopy, Retrograde pyelograms, Ureteroscopy, Removal of necrosed blocking papillae and stenting/ Nephrostomy. No patient in this series was subjected to nephrectomy. **Results:** Five patients out of 24 endoscopic intervention patients were oligo-anuric before procedure. Whereas three out of sixteen patients in control group were oligo-anuric. All these patients were Hemodialysed on emergency basis. After intervention four out of five patients started having brisk urine output within 36 hrs post procedure. Dialysis support was tapered in these patients. One patient in the endoscopy group required dialysis support for six weeks. In medical management group all three patients had to be maintained on dialysis support even after two months. Additionally four more patients in this group became oliguric and had to be started on dialysis. Fever with chills reduced within first 48hrs in 20 out of 24 patients in intervention group compared to 7 out of 16 cases which was statistically significant (p value <.0001. p value<.05 in this study statistically significant). Patient Total leukocyte counts were on decreasing trend in 21 out of 24 endoscopic intervention cases after 48 hrs compared to only six out of 16 medical management group (p value<.002) which was statistically significant. 18 out of 24 patients were discharged from the hospital within seven days compared to only three out of 16 cases in medical management group (p value<.0001). Only one death was recorded in endoscopic intervention group compared to four cases in medical management group (p value<.004). **Conclusion:** Early endoscopic intervention in the form of relief of obstruction after medical stabilisation of the patients and intravenous antibiotics has very important role in successful clinical outcome in the critically sick patients

of Renal papillary necrosis associated acute pyelonephritis. In our series endoscopic intervention group had significantly lower need of long term dialysis support, prolonged hospital stay and faster clinical improvement compared to prolonged medical management series.

POD 05 – 04

Clinical profile of urological emergencies in tertiary care center in north western india: need of training with discrete emergency urology unit

Talreja Shyam M, Tomar Vinay, Yadav Sher Singh, Priyadarshi Shivam, Vyas Nachiket, Agarwal Neeraj

SMS Medical College & Hospiatl, Jaipur

INTRODUCTION & OBJECTIVE Trauma cases constitute a colossal proportion of emergency cases; of which urological trauma as well as acute presentations constitutes a significant portion. Training in the emergency unit is yet not incorporated in urology curriculum. This study was undertaken to evaluate the clinical profile of emergency urological and referral cases with their interventions required. **METHODS** A retrospective study from August 2013 to July 2014 was conducted at Department of Urology, SMS Medical College & hospital, Jaipur. Patients included in study were as follow: 1) Cases who directly presented to urology department for emergency admission. 2) Those cases referred for urological consultation. **RESULTS** A total of 11,139 cases were admitted in urology department; out of which 2345 (21.05%) cases were from emergency room. Renal colic (24.2%) happened to be the most common presentation in emergency room followed by chronic urinary retention (14.7%). Total no. references for urological consultation were 5310 in the study period of one year. Majority of the references came from Medicine ward (22.59%). In referred cases Hematuria with 17.75% was the leading presentation followed by Traumatic catheterization (11.97%). Most common urological intervention done in referred cases was supra pubic catheterization (27.20%) while percutaneous nephrostomy (32.78%) in the directly admitted cases. **CONCLUSION** In accordance with the increasing need, attention needs to be drawn on the requirement of a discrete emergency urology unit with separate observation ward and incorporation of compulsory emergency training in urology curriculum.

POD 05 – 05

Surgical management of failed pyeloplasty: A single centre experience

Bansal Ankur, Singh Vishwajeet, Sankhwar Satyanarayan, Kumar Manoj, Singh Bhupendra pal, Goel Apul, Sinha Rahul Janak

KG MU, Lucknow

OBJECTIVE To share our experience in treating patients with failed pyeloplasty. The ideal approach to this rare entity is not well established. **METHODS** Retrospective record review of patients undergoing pyeloplasty from July 2009 to December 2013. All cases that required any type of reintervention, excluding stent removal, were analysed. Data collected included: demographics, indication for reintervention surgery, presence of crossing vessels and type(s) of reintervention with the correspondent success rate(s). **RESULTS** Overall, pyeloplasty failure rate was 8.6% (24/278 patients). (5.9%). Indications for reintervention were as follows: worsening asymptomatic hydronephrosis 11 of 24 (45.8%), pain 8 of 24 (33.33%), urosepsis 5 of 24 (20.8%). Eighteen of 24 (75%) improved with 1 and six of 24 (25%) had required 2 reinterventions, respectively. Mean interval between the first operation and subsequent interventions was 7.2 and 16.4 months for the first and second reinterventions, respectively. Modalities of reintervention with respective success rates were as follows: double J stent insertion in 3 (33.33%), endopyelotomy in 7 (57.1%), redo pyeloplasty in 17 (94.1%), and ureterocalicostomy in 3 (100%). Only 1 patient was documented to have a missed crossing vessel. All patients were stable and doing well after a mean follow-up of 29 months after the first operation. **CONCLUSION** According to this series, more invasive and definitive techniques, such as redo pyeloplasty and ureterocalicostomy, are more successful than minimally invasive ones to treat failed pyeloplasty and should probably be offered sooner rather than later.

POD 05 – 06

Prospective study to evaluate chronic kidney disease after nephrectomy in indian scenario

Verma Shashi, Tomar Vinay, Yadav S.S, Priyadarshi Shivam , Vyas Nachiket, Agarwal Neeraj

S.M.S. Medical College & Hospitals, Jaipur

Introduction: Radical nephrectomy leads to impairment of renal function. There is an overlap of risk factors for chronic kidney disease and RCC. So, it is likely that RCC patients have reduced renal function and are at risk of progression of CKD. AIMS AND OBJECTIVES: To evaluate chronic kidney disease in patients after nephrectomy (radical, simple, donor). MATERIAL AND METHODS: Two hundred twenty patients with a normal contralateral kidney who underwent nephrectomy (76 radical, 92 simple and 52 donors) were included in the study. All patients were under regular follow up. All patients were evaluated with CECT with CT urography preoperatively. Presurgical kidney function evaluation included negative urinalysis for proteinuria, microscopic hematuria, or dysmorphic red blood cells. Post-operative follow up were done at 1 month and every six months subsequently. The follow up included the measurement of serum creatinine and GFR of retained kidney by CKD-EPI equation. INCLUSION CRITERIA: Patients of all age groups and both sexes with normal Contralateral kidney, were included in the study. EXCLUSION CRITERIA 1) Incomplete baseline data. 2) Any previous kidney surgery (ipsilateral and contralateral). 3) CKD stage > 3. RESULTS: Twenty three (23) out of seventy six (76) patients (30.3%) after radical nephrectomy and five (5) out of eighty (92) patients (5.43%) after simple nephrectomy migrated to CKD stage 3. There was no CKD stage migration in donor group. Conclusion: Our study shows that significant number of patients have progression in their CKD stage after radical nephrectomy as compared to simple nephrectomy

Podium Session 6: BASIC SCIENCES AND MISCELLANEOUS 2

POD 06 – 01

Giant hydronephrosis; Role of reduction pyeloplasty with Dual drainage as a treatment modality.

Vinay Kumar, Bhat AL, Aeron R, Upadhyay R, Sexena G, Baid M

S.P. Medical College, Bikaner

Objectives : To formulate a strategic approach for the treatment of giant hydronephrosis based upon anatomical and functional status of renal units in the individual patient. Methods: We have treated 18 cases of giant hydronephrosis between May 2011 and June 2014. Age of the patients was in the range of 5 to 52 years. 10 were males and 8 were females. USG of abdomen was done as primary test, IVU revealed non-visualized unit of the affected side in 13 patients. Renogram was done in all patients. Percutaneous nephrostomy was done in selected patients with severe symptom, derangement of renal function, infection and anuria. Reduction pyeloplasty with Dual drainage as a treatment modality was done in 14 patient with mild to moderate thick renal parenchyma. Four patients were subjected to nephrectomy because of paper thin parenchyma (intra-operatively) and infection. After 3 weeks, Follow up USG was done and Nephrostomy tube and stents were removed. Results : All 14 patient had good nephrostomy output in post operative period. Follow-up renogram, in 8 patients who underwent reconstructive procedure had significant improvement in renal function and optimal drainage. Follow-up range is 4 months to 3 years. Conclusions: In salvageable unit, intra-operative assessment of renal parenchyma should dictate the type of reconstructive procedure. In a dilated renal system with mild to moderate thick renal parenchyma, reduction pyeloplasty with Dual drainage is a reasonable option irrespective of pre-operative renogram. In very poorly function unit with gross infection and paper thin parenchyma, nephrectomy is the procedure of choice.

POD 06 – 02

Ureteroscopic lithotripsy under sedoanalgesia versus eswl in the management of distal ureteric calculus – a

comparison of effectiveness and patient satisfaction

Suraj Hegde P, Manikandan, Shanmughadas K V, Madhavan N, A T Rajeevan, Dineshan K M, A V Venugopalan, Felix Cardoza

Government Medical College, Calicut

Introduction and Objective: In this study we aim to compare between the effectiveness and patient satisfaction of URS under sedoanalgesia with ESWL for distal ureter calculus. Methods: Prospective study comparing patients with a single radiopaque distal ureter calculus between 5mm and 15 mm between May 2013 and March 2014. The patients were counselled on particularities of each treatment and were given the choice to accept the desired treatment. ESWL was done using electrohydraulic lithotripter. URS was performed using semirigid ureteroscope. To evaluate the subjective pain and patient satisfaction, a 10 point visual pain scale and 5 point satisfactory questionnaire were asked to patients before discharge. Patients were followed up at one and three months after discharge and stone free rates were described as no visible fragment on postoperative imaging. Results: 68 patients were included in the study with 43 patients in URS group and 25 in ESWL group. Average pain was significantly low in ESWL group (4.34) compared to URS group (5.23). However, when compared in females, pain score was similar in both groups (4.12 vs 4.24). The satisfactory point was 3.93 in URS group and 4.03 in ESWL group. The success rate was 81.3% in URS group compared to 67% in ESWL group. Conclusion: This study shows that URS under sedoanalgesia is has better success compared to ESWL in management of distal ureter calculus. URS under sedoanalgesia is better tolerated in females than males. Hence URS under sedoanalgesia is better treatment option in females.

POD 06 – 03

Effects of uro-selective alpha blockers on urodynamic parameters in primary bladder neck obstruction in men

Sudrania M K, Dangi AD, Chandra Singh J, Devasia A, Kumar S, Kekre NS

CMC Vellore

Aims and Objectives- To assess the effect of Tamsulosin on urodynamic parameters and Quality of life (QOL) in male patients with primary bladder neck obstruction (PBNO). Materials and methods- It is a single center prospective observational study done from July 2013 till date. All male patients between 18-50 years diagnosed with type I PBNO after Videourodynamic study were recruited in the study. Patients with diabetes mellitus, psychiatric illness, neurological disease, previous pelvic surgery and those having absolute indication for surgical intervention were excluded from study. All were treated with Tamsulosin 0.4 mg once at bed time for 3 months. Urodynamic study, IPSS score, Uroflow were repeated after 3 months. Results: 35 patients had been included in the study till date of which 10 had completed the follow up. Median age group was 40 years. Mean prostate volume and bladder wall thickness were 12 cc and 5.01 mm respectively. There was reduction in the mean I-PSS (from 28 to 15), mean QOL (from 5 to 3.7), mean post-void residual urine (from 206.4 to 115.2 ml), an increase in mean maximum flow rate (from 8.9 to 10.6 ml) after 3 months of treatment. Urodynamic parameters showed reduction in mean PdetQmax (from 85.3 to 65.5, 20.01%), mean BOOI (from 70.3 to 48.7, 30.76 %). 50 % of them had retrograde ejaculation and 10% complained of giddiness for a week. Conclusion- There was reduction in pdetQmax and bladder outlet obstruction index with Uroselective alpha blocker and improvement in symptom scores and quality of life.

POD 06 – 04

A prospective randomized controlled comparative study on role of anticholinergic, uroselective alpha-1 blocker, combination of two drugs & placebo treatment in relief of ureteral stent related discomfort & urinary symptoms

Bansal J

Smt. G R Doshi and Smt. K M Mehta Institute of Kidney Diseases and Research Center, Ahmedabad

Introduction & Objective: Use of a double J stent is associated with significant morbidity in the form of deterioration in quality of life (QOL),

urinary discomfort, pain and psychological effects. Aim of this present study was to evaluate and compare the effect of anticholinergic, alpha blocker, their combination and placebo on ureteral stent discomfort, lower urinary tract symptoms (LUTS) and QOL. Methods: A total of 247 patients were randomized into four groups. Group I received tolterodine 4mg, group II naftopidil 50mg, group III tolterodine 4mg with naftopidil 50mg and group IV received placebo. Stent related discomfort, LUTS and QOL were evaluated using visual analogue scale (VAS), International Prostatic Symptoms Score (IPSS), quality of life component of IPSS (IPSS-QOL) respectively and completing standard questionnaire proforma at the end of first and second week of stenting. Results: Group I, II & III had significantly less pain & IPSS score with better QOL when compared with placebo (group IV) both at the end of first & second week. Group II & III had significantly better pain relief, lower IPSS score and better QOL when compared with group I. On comparing Group II & III, no significant difference was present in pain score, but IPSS and QOL was significantly better in group III Conclusion: Tolterodine or naftopidil or combination, are significantly better than placebo in reducing stent related morbidity. Naftopidil and combination provide significantly better and early control of LUTS than tolterodine. Combination group had minimal pain and LUTS with best QOL and minimal analgesic requirement.

POD 06 – 05

Hydronephrosis as a prognostic marker in patients undergoing radical cystectomy for carcinoma bladder

Suraj Hegde P, Manikandan, Shanmughadas K V, Madhavan N, A T Rajeevan, Dineshan K M, A V Venugopalan, Felix Cardoza

Government Medical College, Calicut

Introduction and Objective: Hydronephrosis in bladder cancer is caused by tumour at the ureteral orifice, secondary ureteral tumours, intramural and extravascular tumour infiltration or compression of ureter. In our study, we tried to analyse the prognostic implication of hydronephrosis in patients with bladder cancer. Methods: Our study was a retrospective study where we analysed reports of 74 patients treated with radical cystectomy with curative intent for transitional cell carcinoma bladder between 2007 till 2013. Results: 23.32% patients had unilateral hydronephrosis and 18.9 % of patients had bilateral hydronephrosis. 40 % of patients with hydronephrosis had tumour involving ureteric orifice who had a better staging compared to those with hydronephrosis and no growth at ureteric orifice. In multivariate analysis, preoperative hydronephrosis was determined to be independent prognostic marker for pT status. There was no effect of hydronephrosis on overall survival rates. Conclusion: Hydronephrosis at the time of diagnosis of bladder cancer is associated with higher probability of advanced disease but it is not a prognostic indicator for overall survival of the patient.

POD 06 – 06

Intrinsic tumour characteristics influencing recurrence in non muscle invasive bladder cancer

Krishnamoorthy H, Mehta N H, Rathore R S, Pillai B S, John R P, Sam M P

Lourdes Hospital, Kochi

Introduction and objectives: Non Muscle Invasive Bladder Cancers can range from low-grade, superficial disease to more aggressive high-grade lesions. The aim of the study was to determine the recurrence of NMIBCs in our hospital and study influence of intrinsic tumour characteristics like grade, stage, size and number on recurrence and comparing it with the data in published literature. Methodology: This is a retrospective study of patients who underwent treatment for bladder tumours from 2008 to 2014. The number, size, grade, stage and site of tumours were studied. Patients with muscle invasive tumours on initial TUR biopsy, those with extensive growths, with upper tract tumours on initial presentation and those with metastasis on initial presentation were excluded. During statistical analysis p value less than 0.05 was considered significant. Results: 73 cases were studied of which 48(65.8%) had low grade and 25(34.2%) had high grade tumours. 38 patients (52.1%) had Ta tumours, 34(46.6%) had T1 and one had CIS. Mean follow up was 34.3 months. Recurrence was seen in 29(39.7 %) patients (33.33% in low grade and 52 % in high grade). Significant association was seen between stage and recurrence. Recurrence in Ta

tumours was 15% and 63.33% in T1 tumours. 14 out of 21 bladder cancers with multiple tumours had recurrence (p=0.006). Grade, size and site had no influence on recurrence in our study. Conclusion: Recurrence is directly proportional to stage and number of primary tumour. Grade, size and site of tumour did not have any influence on recurrence. In our study, recurrence of NMIBCs both stage-wise and grade-wise were less compared to published literature.

Podium Session 7: INFECTIONS 1

POD 07 – 01

Nephron sparing treatment : Is it an choice of treatment in emphysematous pyelonephritis ?

Kuppurajan N, Devdas Madhavan, Barani Kumar

Kovai Medical Center and Hospital, Coimbatore

Introduction & objective In recent time we had more number of patients presenting with Emphysematous pyelonephritis (EPN). Considering renal involvement in diabetes to assess is there a role in conservative treatment for Emphysematous Pyelonephritis Methods Consecutive 26 cases of Emphysematous pyelonephritis from 2012 to till date were treated with conservative treatment. The conservative treatment consist of drainage of the kidney either stent or percutaneous drainage under local or sedation, Intensive care support, Judicial use of higher antibiotics and Insulin sliding scale. All patients had CT KUB plain to assess the grade of the disease. Results Out of 26 patients 6(23%) Grade I, 8(30%) patients had grade II, 7(26%) patients had grade IIIA and 5(19%) patients had Grade IIIB. 50% of patients presented with fever 20% patients presented with urosepsis and hypotension and remaining with abdominal pain. 16(61%) patients had stenting alone 6(23%) patients had stenting and nephrostomy and 4(15%) patients had only nephrostomy. 5 patients required dialysis. All patients had deranged renal function and HbA1C was more than 8 or above. 85% were E.Coli rest were klebsiella. Out of this all patients had Multidrug resistant strain. 4 patients had Nephrectomy two as emergency and two as elective procedure. out of these 2 patients died. on imaging review 60% patients had obstruction either due to stone or sloughed papillae. Conclusion Historically the treatment of choice was emergency nephrectomy with 40 % mortality. In recent time conservative treatment appears to be effective in our small series and may be an standard of treatment in Emphysematous pyelonephritis

POD 07 – 02

A study of risk factors for catheter associated urinary tract infection

Neelakandan R, Rao Karthik B, Leelakrishna P, Ilamparuthi C, Thiayagan K, Muthulatha N

Govt. Kilpauk Medical College and Govt Royapettah Hospital, Chennai

INTRODUCTION Catheter associated urinary tract infection (CAUTI) is the most common nosocomial infection worldwide accounting for nearly 30-40% of all institutionally acquired infections. Understanding the risk factors for catheter associated urinary tract infection is essential for implementing prevention strategies in daily care of our patients. AIM This study aims to evaluate the patient and catheter related factors contributing to the urinary tract infection to help in decreasing the burden of hospital acquired infections. MATERIALS AND METHODS Total of 210 patients were catheterized between 4 to 12 days for variable urological causative factors were included in this study. Urine culture was done before and after catheterisation. various risk factors were assessed for catheter associated infections. RESULTS The most significant factors associated with increased risk of urinary tract infections were Age, catheter size, diabetes, duration of catheterization, a breach in the closed system of catheter drainage and sex. CONCLUSION The urinary tract with an indwelling catheter is highly susceptible to infection. Most patients acquire CAUTI within seven days of catheterization. With more and more inappropriate use of antibiotics there is an increased risk of developing infections with resistant organisms. Prevention of CAUTI rather than cure should be the goal in all patients catheterized for an appropriate indication.

POD 07 – 03**Clinical profile and outcomes of treatment of emphysematous pyelonephritis – a single centre experience****Karthikeyan VS, Mallya A, Nagabhushana M, Keshavmurthy R, Kamath AJ, Chandrashekar CR**

Institute of Nephro Urology, Bangalore

Introduction: Emphysematous pyelonephritis (EPN), is a rare clinical entity, characterized by gas in renal system, due to an acute, fulminant and potentially fatal necrotising process with varying clinical presentations. It is much more aggressive than uncomplicated PN with mortality estimate as high as 90% and significant morbidity. Methods: A retrospective record review of inpatients in our institute (2007-2014), treated as EPN based on radiologic diagnosis was done. Results: Sixty six patients (M:F 27:39) treated for EPN over the past seven years with mean age of 52.32 (\pm 12.48) years were analysed. Duration of hospital stay was 8 \pm 11.25 (Median, IQR) days with 4 (6%) patients requiring ICU admission (Median, IQR = 5.5, 1.5 days) of whom two expired due to septicemia. 56 patients (84.85%) were diabetic, 6 (9%) presented with acute renal failure, with 3 (4.5%) of them requiring hemodialysis, and 11 (16.67%) with thrombocytopenia. Mean serum creatinine was 2.36 \pm 1.63 mg% and median (\pm IQR) total leucocyte count was 12150 \pm 3262.5 cells/cmm. 50 (75.76%) patients were classified as Huang and Tseng Class 2, 7 (10%) Class 3 with perinephric abscess requiring open drainage and 9 (13.64%) had bilateral EPN (Class 4). Majority (43,65%) responded to piperacillin-tazobactam. DJ Stenting was done in 17 (25.76%) patients, PCN in 5 (7.58%) patients and nephrectomy in 2 (3%) patients. Conclusion: Though EPN historically carries high morbidity and mortality, modern day medical management with timely intervention in the form of urinary drainage is effective and curative in most patients resulting in a low mortality rate.

POD 07 – 04**Pelvic urine culture and sensitivity is better than bladder urine as predictor of urosepsis following percutaneous nephrolithotomy****Gururaj R Padasalagi, Ravishankar THS, Shivashankrappa M, Imdad Ali N**

Vijaynagar Institute of Medical Sciences, Bellary

Purpose: PCNL is the most frequently performed surgery for larger renal calculi. Urosepsis occurring postoperatively due to intraoperative manipulation may be catastrophic despite preoperative antibiotic prophylaxis. Several studies have been done to determine the risk factors responsible for postop urosepsis. In this prospective study we compared preoperative midstream urine Culture & sensitivity(C&S) with intraoperative pelvic urine aspiration C&S and determined which is a better predictor of urosepsis. Material & Methods: All the patients of renal calculi undergoing PCNL in a period of 1 year, who fulfilled our selection criterion were considered for the study. All the patients were adequately treated according to midstream urine sample C&S on admission & taken for surgery. Intraoperative initial puncture samples were collected and sent immediately for C&S. All the patients were monitored for postoperative urosepsis features. Results: Total of 43 patients were included in this study, 9 patients initial puncture C&S showed positive for organisms regardless of treatment with antibiotic according to midstream urine C&S. Total 4 patients developed urosepsis, & all of them were C&S positive for initial puncture urine. Conclusions: According to the present study, pelvic sample C&S is a better predictor of postoperative urosepsis than preoperative midstream urine sample. So we recommend collecting pelvic urine to identify the proper organism in patients at risk for sepsis, and hence reducing the postoperative morbidity in patients of PCNL.

POD 07 – 05**Conservative management of emphysematous pyelonephritis - Our experience****Bahekar Vishal V, Sawant AS, Kumar Vikash, Pawar P, Aterkar K, Kumar Vipin**

Lokmanya Tilak Municipal Medical College and Hospital, Sion, Mumbai

INTRODUCTION: Emphysematous pyelonephritis (EPN) is severe necrotising infection of kidney. Older studies report 40%-70% mortality with conservative management. Recent literature suggests low morbidity and mortality with conservative management in selected group of patients. OBJECTIVES: To study outcome of EPN after Percutaneous drainage and/or DJ stenting in selected patients. METHODS: We retrospectively analyzed 11 cases of EPN managed conservatively at our institute from Aug 2012 to July 2014. Patients were classified on the basis of clinical and CT findings. Patients with obstructed system and hydronephrosis or focal parenchymal involvement were included, those having complete parenchymal destruction, more than 2 risk factors i.e. thrombocytopenia, shock, ARF, altered sensorium was excluded from the study. RESULTS : A total of 11 patients with EPN with age range of 31 to 65 years were selected. All were diabetic. 10 had unilateral involvement (class 1 to 3A of Huang and Tseng classification) and one had bilateral EPN(class 4). All were managed by initial resuscitation and antibiotics followed by percutaneous drainage and/or DJ stenting. 2 patients later required delayed nephrectomy after stabilization of their medical condition for nonfunctioning kidney. No mortality occurred. CONCLUSION: Percutaneous drainage and/or DJ stenting has low morbidity and mortality in selected group of patients. These patients should be managed initially with percutaneous drainage and/or DJ stenting with antibiotics and if required delayed nephrectomy.

POD 07 – 06**Study of epididymo-orchitis: 244 cases at Goa Medical College****Gaude V, Mandrekar PTN, Cardoso A, Lawande PR, Prabhudessai MR, Punjani HM**

Goa Medical College

INTRODUCTION AND OBJECTIVE: Epididymo-orchitis is a clinical syndrome consisting of pain, swelling and inflammation of the epididymis and testes. Most common route of infection is local extension, mainly from the urethra or bladder. The objective of the study was to evaluate epidemiology, demography, etiology, clinical features and management. MATERIALS AND METHODS: Retrospective study of 244 patients who presented to Goa Medical College from June'08 to June'14, with epididymitis, orchitis or both. RESULTS: Age group: 15-60 years. Scrotal swelling with scrotal pain was present in most patients while 8 presented with discharging scrotal sinuses. 40 patients had bilateral involvement. Epididymitis (n=58), Orchitis (n=78), Funiculitis (n=24), Epididymo-orchitis (n=84). Causes included: UTI (n=130), prostatitis (n=26), foley catheter in situ (n=24), idiopathic (n=38), mumps Orchitis (n=10), previous instrumentation (n=12), CISC (n=4). 23 patients were diabetic and 2 were seropositive. Urine culture was done in all. Commonest organism isolated was E.coli (128/244), followed by klebsiella (23/244). 25 patients had recurrent epididymo-orchitis, of which 14 patients grew different organism on culture. 211 patients were managed conservatively with antibiotics (2 weeks for acute; 4-6 weeks for recurrent). 28 patients underwent orchidectomy and 5 underwent epididymectomy. 18/244 patients received AKT for 6 months. Tuberculous infection was confirmed on histopathology (10/18) and pus culture (2/18). CONCLUSION: Timely and adequate treatment of UTI is essential to decrease the incidence of epididymo-orchitis. CISC or SPC should be considered in patients who need long term urinary drainage. Non resolving epididymitis often necessitates epididymectomy.

Podium Session 8: INFECTIONS 2**POD 08 – 01****Emphysematous pyelonephritis: prognostic factors and management outcome****Francis SK, Baby M, Jaiswal A, Shivanna N, Tuli A, Mammen KJ**

Christian Medical College, Ludhiana

Introduction and Objective: Emphysematous pyelonephritis (EPN) is severe, necrotizing renal parenchymal infection caused by gas producing pathogens. It is life-threatening emergency, with high mortality. Aim was to analyse the prognostic factors, management and outcome of patients with

EPN. Methods: Retrospective analysis of the clinical data, investigations, treatment, and outcomes of 19 patients with EPN. Results: 84.21% of patients were diabetics. Radiological grading of EPN had 10 patients in class II, 6 in class III and 3 in class IV. *Escherichia coli* (73.68%) was the most common organism in urine. Class III and IV were 45% (9/19) of the cases. Among them 44.45% presented in altered sensorium, 77.77% had hypoalbuminemia, 66.66% had thrombocytopenia. All patients received intravenous antibiotics. One patient had DJ stenting, 6 underwent percutaneous drainage. Survival rate was 63.15% (12/19). Of the patients who did not improve, 71.42% were in class III and IV. All these patients presented in sepsis. 60% of them had altered sensorium. 80% of them had hypoalbuminemia and thrombocytopenia. Overall poor outcome was associated with female gender ($X^2 = 5.70$, $p = 0.02$), altered sensorium ($X^2 = 5.43$, $p = 0.038$), age > 55 years ($X^2 = 6.645$, $p = 0.017$), albumin <3 ($X^2 = 6.537$, $p = 0.017$). Conclusion: Altered sensorium, hypoalbuminemia and thrombocytopenia at presentation were poor prognostic factors. Conservative approach with intravenous antibiotics and percutaneous drainage is a viable strategy for managing EPN. A female patient >55 years with uncontrolled diabetes, altered sensorium and hypoalbuminemia is more likely to have poor prognostic EPN.

POD 08 – 02

Clinical profile, management and outcome of epididymo-orchitis: a 5 year retrospective study

Shah V, Francis SK, Jaiswal A, Parikh A, Tuli A, Mammen KJ

Christian Medical College, Ludhiana

Introduction and objective: Epididymo-orchitis is primarily an infection of the epididymis, most of the times with secondary orchitis. The aim of the study was to evaluate the clinical profile and management outcome of patients with epididymo-orchitis. Methods: All records of patients with epididymo-orchitis were analysed retrospectively in detail for data collection. Results A total of 97 patients were included in the study. All patients presented with scrotal swelling and pain. 59 (60.8%) of them had fever. Most common age group was 41-50 (22.7%) years. 15 (15.4%) had bilateral, 39 (40.2%) had left sided & 43 (44.3%) had right sided involvement. 16 (16.5%) were diabetic. 9 (9.4%) patients gave history of trauma. 48 (49.5%) patients presented with LUTS out of which 28 (58.33%) patients had positive urine cultures. 39 (81.25%) patients had history of BPH, 6 (12.5%) had stricture urethra and 3 (6.25%) had meatal stenosis. 25 (64.10%) were on medical management for BPH. 9 patients underwent TURP and 2 patients developed epididymo-orchitis within a month of surgery. 15 patients progressed to form testicular abscess out of which 8 (53.33%) patients underwent incision and drainage, 6 (40%) had orchidectomy and underwent ultrasound guided aspiration. 1 patient was found to have tuberculosis on testicular biopsy. The remaining had non-specific epididymo-orchitis. Conclusion Epididymo-orchitis is usually seen in patients of age group 41-50 years having LUTS. More than 60% of the cases have a cause and we can hypothesize that if identified and treated early epididymo-orchitis as a complication or sequelae can be prevented.

POD 08 – 03

Management & Outcomes of Emphysematous Pyelonephritis – Our Institution Experience

Arun Karthik P, Dhayanand GS, Girish TD, Amruthraj G Gowda, Madappa KM

JSS Medical College, Mysore

INTRODUCTION: Emphysematous pyelonephritis (EPN) is an uncommon infection characterized by gas in the renal parenchyma and surrounding tissues. It is rapidly progressive, requiring appropriate therapy to salvage the infected kidney OBJECTIVE: In this study, we present the clinical details, the management strategies, and the outcome of forty patients of EPN managed at our center STUDY METHOD: A retrospective analysis of the hospital records was done. A total of forty seven patients with EPN were admitted in our hospital from August 2011 to February 2014. All the patients were managed conservatively or with DJ stenting or percutaneous drainage. Follow-up ranged from three months to one year. RESULTS: Men outnumbered women (64% versus 36%), and 79% of patients were diabetic. The left kidney was more frequently affected than the right one

(66% versus 32%) and both kidneys were involved in 2%. Obstruction of the corresponding renoureteral unit was found in all the nondiabetic and in half of the diabetic patients. Diagnosis was confirmed by gas in the parenchyma or perinephric space by plain x-ray of the abdomen or computed tomography. Of the forty seven patients, thirteen belonged to class I, eighteen to class II, nine to class IIIA, four to class IIIB and three to class IV. *E. coli* was the most common bacteria, which was isolated from urine in 63% of the patients. A prompt attempt to control diabetes was made, and intravenous antibiotics were given. seventeen patients responded only to conservative management. Intervention, in the form of percutaneous drainage or DJ stenting, was done in twenty six patients. Three patient failed to respond to this minimally invasive modality of treatment and had to undergo an open drainage. One patient underwent nephrectomy due to poorly-functioning kidney during follow-up. CONCLUSION: For successful management of emphysematous pyelonephritis, appropriate medical treatment should be attempted. Percutaneous drainage or DJ stenting has been reported as a kidney-saving and life-saving alternative.

POD 08 – 04

Validation study of a vegetable model PCNL access trainer

Maneesh Sinha, Venkatesh Krishnamoorthy

NU Hospitals, Bnagalore and SSIHMS, Puttaparthi

Aim – To validate a vegetable PCNL access trainer in helping the trainee to make a PCNL puncture. Materials and Methods Volunteer trainees from 2 institutions with matched exposure to PCNL divided into simulator and non simulator groups. The simulator group was trained on a vegetable model while the other group underwent the usual training provided at the respective institutes. The trainees then made punctures during actual PCNLs on 5 patients each under supervision of their respective consultants. Fluoroscopy times taken to make the punctures were recorded and compared. Results 8 trainees, 2 at our institute and 6 at the second institute participated in the study. There was a significant reduction in fluoroscopy time in the fluoroscopy group. Median fluoroscopy time was 48 seconds (IQR 42-58) in the simulator group and 84 seconds (IQR 51-95) in the non simulator group. ($P=0.042$) Conclusions Our results suggest that there it does help trainees in converting the visuospatial information provided by the fluoroscopic image into the psychomotor ability to make an accurate puncture

POD 08 – 05

Bacteriological study and structural composition of urinary stones - A single centre experience

Rahman M J, Amer B, Mibang N, Kanwar V, Somarendra K, Singh A K, Singh S R

Regional Institute of Medical Sciences, Imphal

Introduction and Objective- Imphal comes in the stone belt area of India. Recurrence rate of infected stones are higher than sterile stones if the bacteria associated is not eradicated. This study was done to determine the bacteriology of urine and stone samples in urinary stone patients and the correlation of the bacteriological analysis results of stones and urine culture and pyuria. Method: We enrolled 49 patients admitted to the urology department of RIMS Hospital, Imphal from April 2014 to July 2014 diagnosed as having urinary stones. Bacteriological study was conducted on pre-operative urine and operated renal stones. Pre-operative urine samples were collected aseptically for macroscopic and microscopic examination. Both pre-operative urine and operated renal stones were processed for bacteriological culture. Results: Out of 49 patients 31 having UTI and 18 having infected stones. Out of the 18 infected stones 10(55.5%) were also having UTI. Out of the 10 patients having both infected stone and UTI, 7 had same bacteriology for stone and urine. 10(55.5%) out of 18 infected stones having either sterile urine or urine infected with other organism. Out of 22 phosphate containing stones 9(40.9 %) were infected while of 27 non phosphate containing stones 9(33.3%) were infected. Sterile pyuria was found in 7(38.8%) of the infected stone and 4(12.9%) of the sterile stone patients. Conclusions : Voided urine does not always reflect the bacteriology of urinary tract stones. No significant association between phosphate content and

presence of bacteria in the stone. Pyuria doesn't give any idea about presence or absence of infection in the urinary stones.

POD 08 – 06

A study on correlation of microbial culture of stent and symptomatology in patients with lower urinary tract symptoms after DJ stenting

S Saraswathi, P Leelakrishna, R Govindharajan, Ilangovan, N Muthulatha

Govt Kilpauk Medical College, Chennai

Introduction Stent-related morbidities, such as lower urinary tract symptoms (LUTS), stent-related body pain and hematuria, are bothersome and might have a negative impact on quality of life (QoL) and sexual performance for both genders. **Aim of study** - To compare the microbial culture of DJ stents to that of symptomatology, in patients having lower urinary tract symptoms after DJ stenting. **Materials, Methods of study** - The symptoms vary from flank pain, lower abdominal pain, debris in urine, increased frequency of micturition, nocturia, urgency, incontinence, dysuria, work performance, sexual matters, psychological distress and sense of general ill-health. The questionnaires were completed with a stent in situ and 6 weeks after its removal. Forty-eight patients (36 men and 12 women, mean age 52.8 years) completed the study. **Study group** - Patients who were admitted in Kilpauk Medical College and undergone DJ stenting following which they developed significant lower urinary tract symptoms were included in the study. **Study design:** Prospective clinical study. **Study period** – 1 year **Observation and results** - The mean IPSS was 20.25. females reported more of severe IPSS 70%. When assessed with Quality of life questionnaire based on IPSS a score of 4 (mostly dissatisfied). E.coli was the common micro organism. Stent removal was early in patients who had positive culture of both DJ stent and urine combined **Conclusion** - Multivariate analysis reveals that the severe the IPSS, the higher chance of positive microbial culture (either DJ stent, urine or both), the earlier the stent removal in these patients. Urine culture has high positive predictive value for presence of DJ stent culture. However its accuracy from this study is only 48.3%.

Podium Session 9: INFECTIONS 3

POD 09 – 01

Analysis of urinary lipids in patients with chyluria and their relation to outcome of medical management

Yogesh Garg, Goel A, Sankhwar SN, Singh B.P, Singh M, Sharma K, Srinivas AK

KGMU Lucknow

Introduction and Objective Parasitic chyluria caused by lymphatic filariasis is common in India especially in states like U.P and Bihar. There is paucity of literature on chyluria because of rarity of disease in the west. **Aim of study** was to evaluate of urinary lipids in patients with active chyluria before and after treatment and to ascertain any correlation of urinary lipid levels to the outcome of medical management. **Method** All patients of chyluria who were treated conservatively in the Department of urology, KGMU from September 2010 to October 2014 were included in the study. Urinary lipid levels (Triglycerides and Cholesterol) were recorded at the commencement of treatment and at the time of follow up. Depending upon treatment response patients were categorized into responders and failures **Results** A total of 166 patients of chyluria presented to the department for treatment. 131(85 males and 46 females) of these were treated conservatively. Mean age of the patients was 37.55 years. Patients were followed up for a mean period for 10.4 months. A total of 89 patients were free of the disease at follow up of 6 months or more while the rest failed to respond. Mean urinary triglyceride and cholesterol levels in failure cases at presentation were significantly higher (p value< 0.05) than the responders. **Conclusions** Medical management of chyluria gives short-term success rate of 68 %. Higher clinical grade at presentation and history of heavy pre-treatment with drugs are the predictors of poor response to medical management. Higher urinary triglycerides and cholesterol at baseline are poor-risk factors for response to medical management of chyluria.

POD 09 – 02

Role of multimodal therapy versus single agent therapy for painful bladder syndrome/ interstitial cystitis: A comparative study

Mukesh Kumar Soni, Kumar Rajesh Ranjan, Saurabh Joshi, Ravishankar T.H.S, Muddegoudar S, Imdad Ali N

VIMS, Bellary

Introduction and Objective : Painful bladder syndrome / interstitial cystitis (PBS/IC) is defined by the International Continence Society as suprapubic pain related to bladder filling, accompanied by other symptoms such as increased day- and night-time frequency, in the absence of proven urinary infection or other obvious pathology. Its aetiology is poorly understood but is likely to be multifactorial. A proposed pathophysiology describes a cascade of events, including epithelial dysfunction, mast cell activation, and neurogenic inflammation. In the present study we evaluated the role of multimodal therapy versus single agent therapy for painful bladder syndrome/ interstitial cystitis. **Materials and Methods** : The study was conducted from September 2012 to July 2014. A total of 30 patients are divided alternately into 2 groups of 15 patients. Group I received multimodal therapy, comprising Tab. Amitriptyline 25mg at bedtime, Tab. Hydroxyzine 25 mg at bedtime and Tab. Gabapentine 100 mg at bedtime, and Group II received Tab. Pentosan Polysulfate 100mg three times a day for 3 months. O'Leary-Sant questionnaire scores were recorded before starting the therapy and after 3 months of therapy. **Results** : Mean O'Leary-Sant symptom index scores after 3 months of therapy were significantly lower in Group I than Group II. **Conclusion** : Multimodal therapy is more effective than single agent in the treatment of interstitial cystitis.

POD 09 – 03

Clinical presentation and various radiological presentation in cases of genitourinary tuberculosis, experience in tertiary care institute

Jay Dharamshi, M A Siddiqui, M Sane, G Shah, Ashish Gupta, S Bote, S Patil

J. J. Group of Hospitals, Mumbai

Materials and Methods: We made the retrospective study of 50 pt, diagnosed as case of GUTB in our tertiary care centre over the period of three yrs from 2011 to 2014, The clinical history, relevant radiological, laboratory and histopathology findings and treatment were reviewed. **Results:** GUTB has varied presentation and the most common way of presentation is in the form of irritative voiding symptoms. The usual frequency of organ involvement is: kidney, bladder, fallopian tube, and scrotum. The usual tests used to diagnose GUTB are the demonstration of mycobacterium in urine or body fluid and radiographic examination. Multidetector computed tomography(MDCT) forms the mainstay of cross sectional imaging in GUTB. It can easily identify calcification, renal scars, mass lesions, & urothelial thickening.. In cases of renal failure, MRI can be used. Newer examinations such as radiometric liquid culture systems (i.e., BACTEC) and polymerase chain reaction (PCR) give rapid results and are highly sensitive in the identification of mycobacterium. **Discussion & Conclusion:** GUTB can involve any part of the genitourinary system and presentation may vary from vague urinary symptoms to chronic kidney disease. With a high index of suspicion and availability of sophisticated radiological and reliable molecular diagnosis, it may be possible to diagnose a larger number of cases GUTB.

POD 09 – 04

To evaluate the Complications of TRUS guided Prostate Biopsy

Feroz Mohd Khan, Nirmal T.J, Kekre N.S

CMC Vellore

Introduction: Serum prostate-specific antigen (PSA) test and rectal examination are the currently recommended methods of screening for prostate cancer. Majority of the prostate biopsy related complications are mild and self-limited. Infection and bleeding are the most common complications following prostate biopsy. Recently, there is an increasing

incidence of hospitalisation due to infectious complication post biopsy. Aims and Objectives: The aim of the study was to assess prospectively, the complications following TRUS guided prostate biopsy. The primary objective of the study was to assess urosepsis requiring hospitalisation. The secondary objective was to assess the incidence of other complications following TRUS guided prostate biopsy. These include; fever, hematuria, hematochezia, urinary retention and pain or discomfort. Materials and Methods: All consecutive patients under evaluation of suspected carcinoma prostate were included in the study. All patients underwent detailed history and physical examination. Standard 12- Core prostate biopsy was done with single dose of Inj. Amikacin 750mg intramuscular. Inclusion Criteria: Raised prostate specific antigen (PSA >4.0 ng/ml), abnormal digital rectal examination (DRE) or outside biopsy report suggestive of prostate cancer but no slides/blocks available for review. Exclusion Criteria: Patients refusing to give consent or those who were started on antibiotic prior to biopsy irrespective of urine culture and sensitivity. Results: A total of 89 patients underwent TRUS guided prostate biopsy. Fourteen patients were excluded from the study as they received oral prophylaxis before prostate biopsy regardless of their urine culture report. The remaining seventy five patients were included in the study. The mean age of patient was 60.69 years. Diabetes and hypertension were the most common associated co-morbid illnesses. Most common presentation was lower urinary tract symptoms. Only five patients (6.7%) developed low grade fever. Twenty patients (26.4%) had hematuria lasted for less than two days and two patient (2.7%) had prolonged hematuria (more than 2days). Six patients (8%) developed hematochezia which resolved on its own. One patient (1.3%) developed urosepsis and septic shock after prostate biopsy and was hospitalised. Subgroup analysis showed that patients with positive urine cultures had more infection as compared to groups where urine culture was either sterile or contaminants (p value 0.040). Diabetic patients had more infection compared to non-diabetics although it was not statistically significant (p value 0.626). Ten patients were on catheter prior to prostate biopsy. There was no infection noted in this group following biopsy. Conclusion: Trans rectal ultrasound guided prostate needle biopsy is safe for diagnosing prostate cancer. Increased incidence of infection in patients with positive urine culture suggests that treatment of infection and documentation of negative urine culture before biopsy may be wiser. Positive pre-biopsy urine culture and diabetes mellitus are risk factors which should be managed appropriately before planning prostate biopsy.

POD 09 – 05

Role of early Double J stenting in emphysematous pyelonephritis - a single center experience

Deepak Garg, Appu Thomas, K V Sanjeevan, Gnil Kumar, Georgie Mathew, Balagopal Nair, Kanan Nair

Amrita Institute of Medical Sciences

Introduction: Emphysematous pyelonephritis (EPN) is an acute necrotizing infection of the renal parenchyma and perirenal tissue that requires immediate treatment. However, the approach to its management remains controversial with mortality as high as 40%. We conducted this study to determine the role of early DJ stenting of diseased kidney and its outcomes. Materials and Methods: A prospective study of EPN cases revealed 10 consecutive cases from Aug 2013 to May 2014. Results: All patients had diabetes mellitus, presented with urinary tract obstruction by urolithiasis or papillary necrosis. All patients underwent early DJ stenting either under SAB or topical local anesthesia. All patients expect one recovered well and subsequently discharged. One patient expired during the course of treatment. None of the patients had retrograde infection to contralateral kidney in which single system was involved. Conclusion: Our results suggest that early DJ stenting may be considered the initial management for EPN.

POD 09 – 06

Predictors for successful conservative management in patients with emphysematous pyelonephritis

Avinash U K, Chawla A, Mishra D

Kasturba Medical College, Manipal

INTRODUCTION AND OBJECTIVE: Emphysematous pyelonephritis (EPN) is an acute necrotizing infection of kidney. Over the years treatment strategy for this urological emergency has shifted from definitive nephrectomy to

more conservative line improving both mortality and morbidity. We focus to determine the predictors for successful conservative management in patients with EPN. METHODS: A retrospective and prospective analysis of the hospital records involving fifty nine patients, who were admitted from September 2011 to August 2014. All patients met radiologically proven gas formation as criteria for diagnosis. The following variables namely days to diagnosis, shock, Glasgow coma scale, leukocyte count, platelet count, glycosylated Hb, Serum Creatinine, liver function tests and need for respiratory support were analysed with Chi-square test to validate the predictors for conservative management. Patients were managed either medically, by drainage or nephrectomy. Follow-up ranged from three to six months. RESULTS: All patients (n=59) were initially managed with aggressive fluid resuscitation, control of blood sugar and parenteral antibiotics. Conservative management was successful in 35 patients in whom predictive parameters were optimum (P<0.05). Intervention in form of percutaneous drainage (n=9) for perinephric and paranephric collection or DJ stenting (n=13) for moderate hydronephrosis in 22 patients. Two patients underwent nephrectomy. Overall survival rate was 93.2%. Intervention in any form and poor prognosis was strongly related to patients in shock with altered mental status, deranged liver function tests, deranged renal parameters, respiratory distress requiring supportive treatment, delayed presentation and extensive renal involvement. CONCLUSION: EPN can be managed conservatively in patients wherein predictive factors at presentation is within the optimal range making conservative management a safer and effective option.

Podium Session 10: BENIGN PROSTATIC HYPERPLASIA - 1

POD 10 – 01

A prospective randomized study comparing the efficacy of tamsulosin and placebo in the management of acute urinary retention secondary to benign prostatic hyperplasia until definitive therapy

Sanjeev Kumar.S, Chandramohan.V , Leelakrishna.P, Pithai Balashanmugam.K , Muthulatha.N , Thiyagarajan.K.T

Govt. Kilpauk Medical College , Chennai

Management of Acute Urinary Retention (AUR) due to BPH involves immediate bladder catheterization usually followed by prostatic surgery, with a greater morbidity and mortality associated with emergency surgery (within few days after AUR) and the potential morbidity associated with prolonged catheterization. Till date, the first line of treatment in these patients is the use of a trial without catheter (TWOC) with a previous administration of an alpha-blocker that should increase the likelihood of success. In this study we compared the efficacy of tamsulosin and placebo in the immediate management of patients with acute urinary retention secondary to benign prostatic hyperplasia undergoing trial without catheter and assessed effect of tamsulosin in the success rate of trial without catheter with respect to prostate size, patient age and post void residual. METHODS: Patients with acute urinary retention due to BPH (total 74), were catheterized and randomized into two groups: Group A; Tamsulosin 0.4mg (37 patients), Group B: Placebo (37 patients). After four days, catheter was removed and patients were put on TWOC. A TWOC was considered successful if the patient had voided volume more than 100 ml and post-void residual urine less than 200 ml. CONCLUSION: 1. Tamsulosin increases the success rate of trial without catheter in patients with acute urinary retention, in patients with larger prostate, in older age when compared with placebo 2. Post void residual urine is significantly reduced by addition of tamsulosin in patients with acute urinary retention undergoing trial without catheter

POD 10 – 02

Impact of Intravesical prostatic protrusion (IPP) on the treatment effect of silodosin in patients with BPH

Patnaik Pranab, Shaw D, Khan S, Rathi V, Trivedi S, Dwivedi U.S.

IMS, BHU, Varanasi

INTRODUCTION: Intravesical prostatic protrusion (IPP) is the result of morphological changes leading to protrusion of hypertrophied prostate tissue into the bladder. It is known that more extensive IPP

can lead to increased voiding symptoms by causing more serious bladder outlet obstruction (BOO). Measurement of IPP has the advantages that it is reproducible, has parameters and correlations established by conventional PFS, and does not require urination during the test. Present study analyze the effectiveness of silodosin 8 mg once daily for 3 months according to the degree of intravesical prostatic protrusion (IPP) in patients with benign prostatic hyperplasia (BPH). MATERIALS AND METHODS: Between January 2013 and January 2014, a total of 67 BPH patients over 50 years of age treated with silodosin 8 mg were enrolled in this study. The patients were classified into three groups according to the degree of IPP: below 5 mm (group A), between 5 and 10 mm (group B), and over 10 mm (group C). Prostate volume, prostate-specific antigen, International Prostate Symptom Score (IPSS), maximal urinary flow rate (Q_{max}), and postvoid residual volume (PVR) were measured before treatment, and improvement in the three groups was compared after 3 months. The clinical significance of IPP was evaluated following treatment with silodosin. RESULTS: The mean age of the patients was 65.4 yrs. Comparison of parameters before and after 3 months treatment, showed that medication improved the total IPSS, Q_{max}, and PVR in group A & group B as compared to group C. The improvement was more significant (p<0.001) in group A as compared to other groups. CONCLUSION: Men with IPP exceeding 10 mm seem to be more frequently poor responders to medical treatment with silodosin among patients with lower urinary tract symptoms due to benign prostatic obstruction.

POD 10 – 03

A study of complications post transurethral resection of prostate in patients with and without acute urinary retention

Nayak S V, Chandrashekar C R, Prakash H S, Gupta N K, Nipun A C

Institute of Nephro Urology Bangalore

Introduction and Objective Benign prostatic hyperplasia (BPH) is a common problem encountered in urology. In developing countries significant proportion of patients of BPH seek medical advice only when they get complications of the disease. Studies have shown that BPH patients with acute urinary retention (AUR) who undergo transurethral resection of prostate (TURP) are associated with a higher risk of complications. We carried out a prospective study to determine if there was a significant increase in post operative complications in BPH patients with AUR undergoing TURP at our institute. Methods A prospective study was conducted from February 2013 to July 2014. All patients with BPH who underwent TURP were included. They were divided into two groups, with AUR and without AUR. Patients with prostate cancer, parkinsonism, multiple sclerosis and chronic retention were excluded. The factors evaluated included bleeding requiring transfusion/ clot evacuation, sepsis, need for recatheterisation, incontinence, mean length of hospital stay. Results A total of 462 patients were included in our study. Of these 86 (18.61%) were without AUR and 376 (81.38%) were with AUR. Bleeding requiring blood transfusion /clot evacuation and sepsis was found only in AUR group. The AUR group had higher rates of recatheterisation, incontinence and mean length of hospital stay but it was not statistically significant. Conclusions Our study did not show a statistically significant difference in post operative complications in patients presenting with AUR. There is however a need to raise the level of public awareness of BPH to promote earlier treatment and elective surgery.

POD 10 – 04

Effect of short term finasteride therapy on intraoperative blood loss during transurethral resection of prostate

Kumar Rajesh Ranjan, Mukesh Kumar Soni, Gururaj P, Saurabh Joshi, Ravishankar THS, Muddegoudar S, Imdad Ali N

Vijayanagar Institute of Medical Sciences, Bellary

INTRODUCTION AND OBJECTIVE: Transurethral resection of the prostate (TURP) remains a gold standard procedure for BPH in most centers. Blood loss is one of the most important causes of morbidity during TURP. The effect of finasteride, which is a 5-alpha-reductase inhibitor,

on prostatic bleeding due to BPH is well documented as it reduces the prostatic blood flow and vascular density. The present study is conducted to determine effect of short term pretreatment with finasteride in patient undergoing transurethral resection of prostate (TURP) in reducing intraoperative blood loss. MATERIALS & METHODS: In this study 40 patients with BPH fulfilling our selection criteria, undergoing TURP were randomized into two groups of 20 patients each. First group (20) received 5mg of finasteride once daily for 4 weeks prior to surgery and other group (20) remained as control. The blood loss was quantified using following formula (Total Irrigating fluid volume X Hemoglobin concentration in irrigating fluid/ Preoperative serum hemoglobin). RESULTS: The total amount of bleeding & bleeding per gram resected tissue were significantly lower in finasteride group. There was no significant difference in two groups regarding age, IPSS, PSA, prostate volume, preoperative serum Hb, hematocrit & mean operative time. CONCLUSIONS: Preoperative short term finasteride helps in reducing intraoperative bleeding regardless of prostate volume in TURP.

POD 10 – 05

The Role of Uroflowmetry as an Independent Predictor of Failure of Medical Management in Patients with Benign Prostatic Enlargement

Vishnu R, Nithya R, Anish KP, Kiran S, Rajanikanth VS, Chandrasenan N, Sivaramakrishnan P

Government Medical College Hospital, Thiruvananthapuram

Introduction and objective Uroflowmetry is an objective test for the evaluation of lower urinary tract symptoms due to benign prostatic enlargement (BPE). The aging population with poor vision and cognitive dysfunction often find difficulties in answering the questionnaires that help in the subjective assessment of lower urinary tract symptoms. Our objective was to find out whether there is a significant difference in the uroflowmetry parameters between patients who failed medical management and those who did not. Methods Uroflowmetry parameters of 589 patients with lower urinary tract symptoms (LUTS) were collected. The details of procedures and further follow up of the patients were collected from the hospital data bank or through telephone. Eighty four patients were excluded from the final analysis due to paucity of data. Statistical analysis was performed using SPSS version 16. Results A total of 505 patients were included in the final analysis. Failure of medical management was noted in 115 patients. There were no significant differences in the uroflowmetry parameters between patients who failed medical management and those who did not. The p-values for maximum flow, average flow and post void residual urine were 0.206, 0.377 and 0.481 respectively. Conclusion Uroflowmetry has limited role as an independent predictor of failure of medical management in patients with BPE.

POD 10 – 06

Effects of obesity on prostate volume and lower urinary tract symptoms

Amit K. Bhoir, Shanmughadas K V, Madhavan N, Rajeevan A T, Dineshan K M, Venugopal A V, Felix Cardoza

Government Medical College, Calicut

INTRODUCTION & OBJECTIVES: Many studies have documented that obese men tend to have larger prostate volume. Few recent studies have pointed out at relation between obesity and LUTS as well. Purpose of this study was to evaluate effects of obesity on prostate volume and LUTS. STUDY METHODS: From Feb 2013 to Jan 2014, men aged \geq 50 yr who presented with LUTS were enrolled for this study. All patients were evaluated with IPSS questionnaire, anthropometric measurements including height, weight, waist and hip circumferences followed by digital rectal examination, Sr. PSA and USG to determine prostate volume (PV). RESULTS: In this prospective study, 280 men with moderate to severe LUTS (IPSS \geq 8) were included. On analyzing anthropometric data, only waist circumference was significantly related to prostate volume. But there was no correlation between anthropometric measurements and LUTS. CONCLUSION: Central obesity is better predictor of prostate volume than overall obesity. On the other hand, there is no significant relation between obesity related parameters and LUTS.

Podium Session 11: BENIGN PROSTATIC HYPERPLASIA - 2

POD 11 – 01

Predictors for failed initial urethral catheterization in patients with acute urinary retention

Ashish Nair, Sam Thampan, Vikas Kumar, Shailendra Shukla, Vasudevan. S

Government Medical College, Trivandrum

INTRODUCTION Urological emergencies though rare, cause significant morbidity to the patient. Acute urinary retention is the most common cause for urology consultation in an emergency setting (24-30%). The incidence of acute urinary retention is 2.96-3/1000 men. The immediate management of acute urinary retention involve decompression of the bladder, most commonly by placing a per-urethral catheter. SPC is done when per urethral catheterization fails or is contraindicated. Difficult or failed urethral catheterization is a common problem, common causes being improper technique, benign prostate enlargement, urethral strictures, cancer prostate and bladder neck contracture. **AIM** To find the predictors for failed initial per urethral catheterization in patients with acute urinary retention **MATERIAL AND METHODS:** Patients with acute urinary retention with failed per urethral catheterization referred to urology unit III of GMC Trivandrum were evaluated and followed prospectively. **RESULTS:** Around 50 % of the patients referred to urology unit for failed catheterization were readily catheterized by 18 Fr Foley catheters. Improper technique for catheterization was the most important predictor for failed catheterization in our study (50%). The chances of failed catheterization increase with the number of previous attempts at catheterization. Benign prostatic enlargement with high bladder neck was the cause of failure in half of the cases. One third of the patients had false passages in urethra subsequent to previous catheterization attempts. Among technical factors experience of the person attempting initial catheterization was an important predictor for failure. Use of rigid end 18 Fr Foley catheters was associated with higher success rate for catheterization.

POD 11 – 02

Prospective randomised comparative study of safety and efficacy of silodosin versus tamsulosin in the medical management of benign prostatic enlargement causing lower urinary tract symptoms

Sanjeev Kumar Jha, Anup Kumar, Pawan Vasudeva, Rohit Kumar, Harbinder Singh, Gaurav Kumar

VMMC & Safdarjung Hospital, New Delhi

BACKGROUND All alpha blockers have been shown in different studies to be superior to placebo in relieving the symptoms of lower urinary tract symptoms [LUTS] due to benign prostatic enlargement [BPE] but there are very few prospective randomized studies in literature comparing their safety and efficacy. The current prospective randomized study compares the safety and efficacy of two commonly prescribed Alfa-blockers, Silodosin and Tamsulosin. **METHODS** Patients were randomized into Group A and Group B. Group A and group B respectively received 0.4 mg Tamsulosin and 8mg Silodosin daily at night. Patients were followed up at 1, 3, and 6 months. IPSS, QOL, DRE, PSA, Qmax, PVRU, side effects, if any, were recorded at each follow-up. Primary outcome measures for group analysis included: A] Efficacy parameters: Qmax, QOL, IPSS and PVRU, B] Safety parameters : Complication. Secondary outcome measures for group analysis included: PSA and prostate size. Results with p value <0.05 were considered statistically significant. **RESULTS** In both groups, there was significant improvement in the IPSS score, QOL score, and Qmax as compared to the baseline at each of the follow-up visits with the most dramatic improvement being seen at the first month follow-up. Prostate size, PSA and PVRU did not show any significant change in either group at any of the follow-up visits. There was no statistically significant difference in outcome between the groups. **CONCLUSIONS** Tamsulosin and Silodosin are equally safe and efficacious in improving LUTS due to benign prostatic enlargement.

POD 11 – 03

Behavior of bladder after TURP in underactive detrusor patients

Patnaik Pranab, Shaw D, Khan S, Rathi V, Trivedi S, Dwivedi U.S.

IMS, BHU, Varanasi

Introduction Transurethral resection of the prostate (TURP) remains the gold standard treatment for benign prostatic obstruction. It may also be effective for the patients who have Detrusor underactivity (DU) with LUTS unresponsive to medical treatment or in cases with a large residual urine volume because it reduces the outlet resistance. However, there is limited information on the efficacy of TURP & behavior of bladder after TURP in these patients. In the present study we aimed to assess the urodynamic behaviour of bladder following TURP in DU patients. **Material & Methods** A total of 41 patients (mean age - 68.7yrs) with DU were included & evaluated in this study. All of these patient underwent TURP for some degree of suspected outlet obstruction. All of these patients underwent detailed preoperative evaluation & urodynamics assessment preoperatively & following TURP. International Prostate Symptom Score (IPSS), quality of life (QoL), maximum flow rate (Qmax), postvoid residuals (PVR), and various urodynamic parameter evaluating detrusor function [pdetQmax, bladder contractility index (BCI)] were compared before & after TURP. **Results** The mean follow-up period was 9.2 months. The mean IPSS and QoL improved significantly following TURP. There also a significant decrease in mean PVR & increase in mean Qmax value after TURP. However there is no significant improvement in total cystometric capacity, BCI & pdetQmax was evident even after TURP. **Conclusion** DU may not be a contraindication for TURP. If the patients had obvious BOO, the outcome of TURP may be promising in spite of the existence DU. But relieving the obstruction surgically does not improve the contractility, which is important when considering and counselling for TURP operation. Underactive detrusors remains underactive.

POD 11 – 04

Evaluation of the effect of tamsulosin and tadalafil in relieving BPH related symptoms: A randomized double blind placebo controlled cross-over study

Harbhupinder Singh Sandhu, Mavuduru RS, Pattanaik S, Singh SK, Mandal AK

PGIMER, Chandigarh

Introduction: In BPH, ED and LUTS are correlated and treated with PDEI alone or in combination with an Alfa-blocker. But current scientific evidence is insufficient to predict patient profile that would respond preferably to either of drugs. This was a randomized double blind placebo controlled cross-over study evaluating the effect of Tadalafil and Tamsulosin on BPH-LUTS. **Methods-** Men ≥ 45 years of age, having IPSS ≥ 8 were included. Patients received a placebo lead-in period for two weeks, followed by drug A (Tadalafil 10mg OD) or drug B (Tamsulosin 0.4mg OD) for six weeks; and then crossed over for another six weeks after a placebo washout of 4 weeks. The randomized sequences were either AB or BA. IPSS scores, uroflow parameters and IIEF score were recorded. Appropriate statistical tests were applied. **Results—**36 patients out of 40 completed the study. Demographic and baseline characteristics were comparable. No significant placebo effect observed. The effect of Tadalafil and Tamsulosin were significant on total IPSS score and quality of life ($p < 0.05$). There was no significant difference between the drugs for the extent of effect. Significant period effect was observed ($p < 0.05$) but there was no sequence effect ($p > 0.05$) Half of the non-responders to either of drugs responded when the drug was changed to other. Tadalafil showed good improvement in EF than Tamsulosin. **Conclusion-** Both Tadalafil and Tamsulosin equally improved LUTS with better improvement in ED with Tadalafil. Patients who did not respond to Tadalafil showed improvement with Tamsulosin and vice-a-versa.

POD 11 – 05

Can TRUS estimation of the prostate volume predict the outcome of TURP in chronic urinary retention?

Cornerstone V Wann

Christian Medical College and Hospital, Vellore

Aim- To study whether prostate size influences the outcome of TURP in

patients with chronic retention. Methodology- This was a prospective study conducted in the department of urology, from 1st August 2011 to 31st January 2014. All patients with chronic retention planned for TURP were enrolled. Patients were evaluated by IPSS scoring, digital rectal examination (DRE), TRUS estimation of prostate volume and intravesical prostate protrusion (IPP), glands resected and post op PVR. The primary end point was successful voiding with PVR of less than 150ml after the operation. Results- There were 139 patients with chronic retention, 118 patients were evaluated. The mean age was 65.54±8.735(43-86) and prostate volume was 47.23±26.75. DRE correlated with TRUS volume (Pearson correlation 0.489). Patients who present with acute on chronic retention had a significantly larger prostate (51.4 Vs 34.6ml, p=0.008) and greater IPP (7.8 Vs 6mm). Patients with prostate more than 40cc had a significantly better outcome (p=0.014) however, no correlation could be established between increase in IPP and outcome. There was no significant correlation of the prostate size with age (Pearson correlation coefficient 0.142), BMI (Coefficient -0.026) and IPSS. Overall, 94% had successful outcome after TURP 8 patients required either CISC or indwelling catheter. Conclusion- Majority (94%) of the patients with chronic urinary retention had successful outcome after TURP. Patients with larger prostate (more than 40cc) are more likely to be catheter-free following TURP. However, in our study we could not establish correlation between IPP and outcome following TURP. Key words- Chronic Urinary Retention (CUR), Transrectal Ultrasonogram (TRUS)

POD 11 – 06

Implication of non-invasive urodynamic parameters on the treatment response in the patients with bph on medical management

Baishya Debajit

Gauhati Medical College and Hospital, Guwahati

Introduction & Objective : The prevalence of BPH rapidly increases after fourth decade of life. Patients can be grouped into mild, moderate, and severe according to the severity of LUTS and IPSS score. Combination of tamsulosin and dutasteride is a well established therapy for BPH more than 40 gms. Non invasive urodynamic parameters like intravesical prostatic protrusion, detrusor wall thickness, prostatic capsular artery resistive index, prostatic urethral angle can predict the outcome of medical therapy in patients with BPH. Objective of our study is to correlate these parameters with treatment response in patients with BPH on medical management. Method- A prospective study conducted in the Department of Urology, in our hospital, from November 2013 to August 2014. 53 patients with BPH more than 40 gm who fulfilled our inclusion criteria were taken up for the study, 3 patient could not complete the study. Treatment response was determined by IPSS score and uroflowmetry. Transabdominal ultrasonography (KUB-P) with doppler was done to measure the prostate weight, intravesical prostatic protrusion, detrusor wall thickness, prostatic capsular artery resistive index, prostatic urethral angle before and 3 months after combination therapy. Treatment response was correlated with non invasive urodynamic parameters. Results: The IPSS score, uroflow, age, prostate volume, RI, IPP, BWT, PUA were correlated before and after treatment. Of 50 patients, 35(70%) showed significant improvement and 15(30%) did not improve with the therapy. Conclusion: Non invasive urodynamic parameters are useful tool to measure the treatment response in a patient with BPH. Ours study throws a light into the importance of NIUS in evaluating treatment response to medical management.

Podium Session 12: ENDOUROLOGY 1

POD 12 – 01

A comparison of intercostal nerve block with bupivacaine after percutaneous nephrolithotomy (PCNL) and peritubal tract infiltration with bupivacaine after pcnl with no intervention group (standard PCNL)

Saurabh Gupta, Goel Apul, Sankhwar Satya Narain, Singh Vishwajeet, Sinha Rahul Janak, Sharma Kuldeep, Sharma Pradeep

King George Medical University, Lucknow

OBJECTIVE Inadequate analgesia results in delayed mobilization, impaired ventilation, and prolonged hospitalization in PCNL. We compared visual analog pain scores (3,6,12 and 24 hours after surgery) in the intercostal block with bupivacaine with peritubular tract infiltration and with no intervention group) in immediate post-operative period. MATERIAL and METHODS: Prospective, longitudinal and time bound (18 months) study in which all patients undergoing PCNL (both tubeless and with tube) in first 6 months were included in the no intervention group, patients undergoing PCNL in next 6 months received intercostal block (ICB) with 20 ml of 0.25% bupivacaine and patients undergoing PCNL in last 6 months of study had peritubal tract infiltration (PTI) with 20 ml of 0.25% bupivacaine after the completion of the procedure. Visual analog pain scores (3,6,12 and 24 hours) and rescue analgesia requirements in the 3 arms of study were compared in immediate post-operative period. RESULTS: A total of 117 (includes 9 tubeless) patients were in no intervention group, 109 (includes 12 tubeless) in ICB group and 106 (includes 14 tubeless) in PTI group. The mean visual analog pain scores at 3 and 6 hours were significantly low (p<0.0001) in PTI group as compared to ICB and no intervention group and were comparable at 12 and 24 hours in all 3 groups in both tubeless and with tube procedures. Rescue analgesia requirement was also significantly delayed (p<0.0001) in PTI group as compared to other groups. CONCLUSION: Peritubular tract infiltration of bupivacaine established its superiority over both intercostal block and standard PCNL in post-operative analgesia and rescue analgesia requirements.

POD 12 – 02

Bedside urethrocystoscopy for patients with failed catheterisation

Sanjay S Deshpande, Raghoji

Ramakrishna Hospital, Solapur

Introduction and Objectives: Urologist is called to catheterise a patient in ICU when others have failed to do so. The objective of this study was, in such cases, by doing urethrocystoscopy whether one can know the cause of failed catheterisation and whether one can avoid suprapubic catheterisation. Materials and methods: Over eight months, 22 patients aged between 45 and 70 years, 20 males and 2 females, underwent such a procedure. 15 patients in ICU and 7 patients in OT. Co-morbid conditions like ARF, CRF, CIRRHOSIS OF LIVER, RESPIRATORY FAILURE, ACUTE MI were the reasons for admission. In ICU urethrocystoscopy was done on the edge of the bed, assistants holding both legs, under local anaesthesia. If stricture was found, guide wire was passed, flexible urethral dilators were passed over the guide wire to 18F and catheter was passed over the guide wire successfully. Results: 16 patients had stricture urethra, two had high over riding bladder neck, both females had tight urethra and two had false passages with clots in the urethra. Only two required Suprapubic Catheterisation which is 90% success rate. Conclusion: Thus, urethrocystoscopy although a simple procedure, if used in failed catheterisation situations is a powerful tool. It will save suprapubic catheterisation and will tell us the cause of failed catheterisation. Hence the urologist when called for, instead of attempting blind catheterisation again, should perform urethrocystoscopy on the site, which avoids SPC and gives scientific cause for failed catheterisations.

POD 12 – 03

Outcomes of supracostal approach in percutaneous nephrolithotomy: single centre experience

Daukiya S, Desai K, Shah S, Shukla K, Chinnannavar P, Dhake R, Singh V,

Civil Hospital and B.J. Medical College, Ahmedabad

PURPOSE: We report our experience to assess the outcomes of the supracostal puncture in patients undergoing percutaneous nephrolithotomy. METHODS: We retrospectively reviewed 600 patients, 420 (70 %) male and 180 (30%) female, who underwent PCNL between Aug 2010 to Aug 2014 in the department of Urology, Civil Hospital, B J Medical college, Ahmedabad. We compared both approaches regarding stone-free and complication rates, and the need for auxiliary procedures. Stone clearance was assessed by intra-operative fluoroscopy and postoperative X-ray in all patients and an ultrasound & CT scan in selected cases. The indications for a supracostal access were staghorn stones, pelvic stones, upper ureteral and multiple calyceal stones in high-lying kidney. All procedures were performed in a single sitting under general anesthesia. All supracostal punctures were made in the 11th

intercostal space under fluoroscopic guidance. 26Fr Adult Nephroscope & 30 Fr Amplatz Sheath was used in all patients. Nephrostomy tube was removed after 6 Hrs. Perurethral catheter was removed on post operative day 2. RESULTS: The complications among subcostal and supracostal approaches was comparable. There were 9 patient having hydropneumothorax or hydrothorax but no mortality. Significant bleeding requiring blood transfusion was observed in 54 patients (9%), transient fever in 66 (11.0%) and prolonged urinary leakage through the nephrostomy site in 48 patients (8%). Of the 600 renal units 510 (85%) were stone-free after percutaneous nephrolithotomy at discharge from the hospital. Of the remaining 90 units, 30 (5%) were stone-free and 60 (10.0%) had insignificant residual stones after shock wave lithotripsy. Total complete clearance was achieved in 540 patients (90.0%). CONCLUSION: Supracostal puncture is a safe and effective approach with acceptable morbidity in selected cases of staghorn, upper ureteral, pelvic stones and upper calyceal calculi. It should be used when required without fear of additional significant complications

POD 12 – 04

AIO (ALL IN ONE) Shah Sheath 10/12F for superperc in upper tract urolithiasis

Kaushik shah,

Varun Kidney Hospital & Prasutigruh, Surat

INTRODUCTION & OBJECTIVE Suction is an integral part of PCNL during & after ultrasonic, pneumatic & laser lithotripsy. AIO SHEATH allows suction in superperc. METHODS AIO SHAH SHEATH has two parts, suction master and interchangeable sheath of 10F of 12, 16 & 20 cm length. Depending on need, sheath of 12, 16 or 20 cm is used. Over a guide wire 10F AIO SHEATH is placed in PCS. 4.5/6.5F short ureteroscope is used to visualize and fragment the stone with laser. AIO Sheath allows continuous fragment removal during & after laser lithotripsy with low pressure in PCS with the help of controlled suction. AIO sheath was removed without keeping nephrostomy. RESULTS Twenty patients (12M/8F) were treated. Stone burden was very variable and included renal pelvic, upper ureteric, calyceal, low volume partial staghorn stone, 10 cases of multiple stones and size of 10 to 29 mm. In one two tracts were used. Complete clearance were achieved in 19 cases with drop of 0.8 gm of Hb, 2 days of stay, one with post-operative fever, no transfusion & no nephrostomy. First 9 cases had DJ stent & last eleven did not have. CONCLUSIONS AIO SHEATH has enabled me to do superperc in all varieties of low volume stones with minimal morbidity. Varying length of interchangeable sheath helps to do superperc from infants to morbidly obese patients. Superperc with AIO sheath needs evaluation from multiple centers to find its true place.

POD 12 – 05

An initial report on Silodosin in spontaneous expulsion of ureteral stents in females

Moin Mohammed Bhavikatti, Ravi Shankar THS, Shivashankarappa, N.Imdad Ali

Vijayanagar Institute of Medical Science, Bellary

Induction and objectives Silodosin is a selective alpha 1 receptor antagonist with documented use in urology in management of LUTS in Bph and also in spontaneous expulsion of distal ureteric stones. our study here aims at depicting the use of Silodosin in spontaneous expulsion of ureteral stents in females. Materials and methods Study was conducted from Jan 2014 to July 2014. A total of 11 female patients who underwent uretero renoscopic lithotripsy and were stented, were included in this study. These patients were put on SILODOSIN 8mg postoperatively and were followed up on day 7, 10 and 14. RESULTS There was spontaneous expulsion of ureteral stents in 7 out of 11. cystoscopic stent removal was needed in only 4 patients. CONCLUSION Our study marks a new perspective and beginning of use of Silodosin in spontaneous expulsion of ureteral stents in female patients. However further validation by future trials is needed.

POD 12 – 06

Experience With 'ULTRA-MINI' PCNL: First 200 cases

Madhu Agrawal, Ketan Agarwal, Manoj Sharma

Rainbow Hospital, Agra

INTRODUCTION: We present our experience of first 200 cases of 'Ultra-mini' PCNL using sheath of size 11-13 F. METHODS: From July 2012 to June 2014, 200 patients with single kidney stone of size between 0.8-1.5 cm underwent PCNL using 'Ultra-mini' PCNL system. This system uses a 1 mm (3 F) telescope, 7.5 F nephroscope inner sheath and 11 or 13 F metallic Amplatz sheath with an irrigation channel. Patients with stones >1.5 cm, multiple stones, anatomical defects, or history of previous surgery were excluded. Stones were fragmented with Holmium laser. All procedures were done in 'tubeless' manner, leaving only a ureteric catheter indwelling along with a Foley's catheter. RESULTS: 187 out of 200 patients had complete fragmentation of stone, while 13 patients required conversion to 'Mini-PCNL' using 12.5 F nephroscope and 15F Amplatz sheath (Storz). The mean operating time was 32.4 + 11.3 minutes. All patients had complete clearance confirmed by X-ray KUB and Ultrasound or non-contrast CT scan at 2 weeks postoperatively. Most patients were discharged from the hospital on the first post-operative day, and majority of patients could go back to work within one week. Two patients required insertion of DJ stent due to clot/ fragment obstruction of the ureter in the post operative period. Two patients had mild secondary hemorrhage around one week postoperatively. CONCLUSION: 'Ultra-mini' PCNL is an additional minimally invasive percutaneous renal stone removal approach in selected stone population, the exact place of which in our armamentarium is under evolution.

Podium Session 13: ENDOUROLOGY 2

POD 13 – 01

A safe technique to prevent faulty dilatation IN PCNL

Pathade Amey D, Javali Tarun, Prakash Babu, Nagaraj H.K.

MS Ramaiah Medical College and Hospital Bangalore

INTRODUCTION&OBJECTIVES We report our simple technique which helps in confirming a correct puncture & aiding in parking guide wire into the pelvicalyceal system which helps in preventing faulty dilatations. STUDY METHODS From Jan 2005 - Jan 2014, 1728 PCNLs were performed. In 345 patients the present technique was used. Desired calyx punctured using 18G needle- C-arm 30 degrees. When puncture of calyx is doubtful. Guide wire inserted through the needle. Dilatation cannula is inserted under fluoroscopic guidance and safety guide wire passed. Our technique is useful when in dilemma?? When doubt whether guide wire entered the system or when not able to park guide wire into distant calyx or ureter. Here we use a Rigid ureteroscope antegradely between two guide wires, Glide gently and trace location of guide wire. Guide wire in system is confirmed if it is not fresh guide wire is parked into pelvicalyceal system. RESULTS In our series in 94.3% of patients our technique was successful in confirming and entering into the pelvicalyceal system. In 86.74% we were able park guide wire into the ureter. CONCLUSIONS This technique helps in confirming position of guide wire in doubtful cases and proper parking of guide wire. Preventing faulty dilatations and thus further damage to renal cortex could be avoided. Bleeding could be minimised which is one of the main complication of PCNL.

POD 13 – 02

Safety and efficacy of Percutaneous Nephrolithotomy in Patients with Solitary Kidney

Chinnannavar P, Desai K, Shah S, Shukla K, Dhake R, Saria V

Civil Hospital and B.J. Medical College, Ahmedabad

Objectives: To review our experience with percutaneous nephrolithotomy (PCNL) in patients with solitary kidneys with a focus on efficacy, safety, and renal function. Material and methods: We reviewed our stone database searching for patients with solitary kidney who underwent PCNL between Jan-2005 and sept-2014. Pre-operative data included patient demographics, renal function, cause of solitary kidney, laterality, renal cortex thickness, stone burden, and Guys score. Intra and post-operative data included patient position, number of access tracts, drop in serum hematocrit level, transfusion rate, operative time, variation of creatinine clearance, complication rate, hospital stay, and stone-free rate. Our outcomes were compared to those reported by the CROES study. Results: Twenty-four patients were included in this study. Compared to CROES study, we had a higher stone burden (620 vs. 347mm²), a longer operative time (110 vs. 75min), a higher stone-free rate (83% vs. 65.4%), and a higher transfusion

(16.6% vs. 10.1%) and low complication rates (4.16% vs. 18.7%). 12% of our patients had multiple punctures compared to only 10.6% of patients from CROES study. Linear regression confirmed number of access tracts as significantly related to, whereas logistic regression showed no correlation between variables in study and complications. Conclusion: Our high volume tertiary center has higher stone-free rate compared to the CROES study. Although PCNL is accompanied by the risk of complications such as severe bleeding that may result in kidney loss in patients with a solitary kidney, the rate of success and complications seem to be similar to CROES study if careful operation and correct selection of candidates are done. Therefore, we recommend cautious performance of PCNL in patients with solitary kidneys.

POD 13 – 03

Impact of Ureteral DJ stenting prior to Ureterorenoscopy on outcome of treatment for ureteric calculi

Halarnakar R.G., Gaude V., Chari P.D., Gomes K., Prabhudessai M.R., Thatte S.W

Goa Medical College

INTRODUCTION AND OBJECTIVE: Relatively little has been published about placement of stent before ureteroscopic procedure. Objective was to analyse the effect of DJ stenting prior to Ureterorenoscopy on stone clearance and complications in the treatment of ureteric calculi. **MATERIALS AND METHODS:** Retrospective study of 834 patients of ureteric calculi (upto 20 mm size) who underwent ureterorenoscopy (URS) from March 2010 to April 2014. Patient characteristics, stone properties, stone free rate, surgical time and complications were studied. **RESULTS:** Commonest age: 30-60 years, male preponderance. URS done 3weeks after DJ stenting. Ureteric calculi site: 232 upper, 256 mid, 346 lower and 68 multiple. Calculi size: <10mm (182), 10-15mm (498) and 15-20mm (154). Mean surgical time = 28.06 minutes. In our study, URS was clear in 30% patients (post stenting), avoiding complications of lithotripsy. 96 patients required re-stenting, of which 25 needed re-URS. Stone free rate was 91.8% 84 patients had Stent syndrome, 10 had Ureteric bleeding while 11 had urosepsis. No ureteric perforation or avulsion seen. **CONCLUSION:** DJ Stent placement prior to URS is associated with higher stone free rates and minimal complications. Significant number of patients have spontaneous clearance of calculus when stented prior to URS. Benefits of DJ stenting prior to URS outweigh stent related complications.

POD 13 – 04

Can silodocin replace the stent in post ureteroscopic lithotripsy patients? Initial report of 20 patients each.

Mallikarjuna Mallappa, Mukesh kumar soni Ravishankar THS shivashankarappa Imdad Ali N

Vijaya Nagara Institute of Medical Sciences, Bellary

Introduction Routinely we insert stent after Ureteroscopic lithotripsy, can silodocin be used instead of stent after ureteroscopic lithotripsy in order to avoid stent related morbidity. **Objective** This study compares efficacy of silodocin with stent to prevent stent related morbidity in post URSL patients. **Materials and Methods** From august 2013 to July 2014, 40 consecutive patients with 5 to 18 mm ureteral stones undergoing URS using pneumatic lithotripsy were alternatively grouped into each group. Group 1 (20 patients) stent removed after 2 week, and group 2 (20 patients) silodocin 8mg given daily night for 2weeks. After discharge patients were asked to report either immediately if they develop flank pain and fever or on post-operative day 3, 7, and 15 **Results** The two groups were comparable in relation with the duration of stent and silodocin therapy, 3 out of 20 patients in whom silodocin was given had flank pain which subsided with analgesics **Conclusion** This study demonstrates that silodocin can be used safely instead of stent in an uncomplicated URSL but, needs large scale multicentric randomized control trails.

POD 13 – 05

RIRS - Our Initial Experience - An Audit

Shah V, Francis SK, Shivanna N, Jaiswal A, Tuli A, Mammen KJ

Christian Medical College, Ludhiana

Objective: This study was designed as an audit of our initial experience with setting up of RIRS and also to highlight the hurdles faced during the

initial phase. **Materials and Methods:** From 1st April 2014 to 30th June 2014, 13 patients with 16 renal units underwent RIRS. 7.5 Fr flexible ureterorenoscope and 20W holmium laser were used. Stone location, bulk, stone clearance, complications and cost effectiveness were studied. **Results:** Of 13 patients, 6 (46%) were male and 7 (54%) were female, aged between 31 - 72 years. Renal stone size ranged from 8 mm- 15 mm. The stone bulk ranged from 8mm- 26mm with an average of 15.5mm. 2 (15.3%) had renal pelvic calculi, 4 (30.7%) had in upper calyx, 6 (46%) in the middle, 6 (46%) in the lower calyx and 2 (15.3%) had additional ureteric calculi. 3 (23%) patients underwent bilateral RIRS. 3 (23%) underwent rigid URS and 1 had laser infundibulotomy for infundibular stenosis along with RIRS. 7 (54%) patients had JJ stenting done priorly. Following RIRS, JJ stenting was done in initial 9(69.2%) cases, which we could overcome in the later cases. 2 patients had residual stones, both had multiple calculi preoperatively. **Conclusion:** In our initial experience of very short period it was found that the additional cost of RIRS compared to URS was not very significant. For an average bulk of 15mm stone RIRS was more cost effective and less morbid. RIRS when used in selected cases has got a good stone clearance rate

POD 13 – 06

Safety and efficacy of percutaneous nephrolithotomy through superior calix access

Karthickeyan N, Chawla A, Hegde P, Thomas J

Kasturba Medical College Hospital, Manipal

INTRODUCTION AND OBJECTIVE: To evaluate the safety and efficacy of Percutaneous Nephrolithotomy (PCNL) through superior calix access. **METHODS:** We analysed our prospective data of 70 patients who underwent PCNL through superior calyceal access. Of the 70 patients, 25 had calculi in multiple calyces, 42 had solitary calculus (pelvis-16, upper calyx-16, lower calyx-5, middle calyx-1, upper ureter -4) and 3 had staghorn calculus. PCNL through superior calyceal access alone was done in 55 patients (78.5%), while accessory tracts through middle or lower calyx were obtained in 12 patients (17.1%). 3 patients (4.2%) required more than one accessory tract. Amplatz size used ranged from 26 – 30 Fr. 20.8 Fr/26 Fr Nephroscope, 8/9.8 Fr ureteroscope were used for stone fragmentation. **RESULTS:** The mean stone burden in our series is 2.0 ± 0.6 cm. 52 patients were male and 18 were female. The mean operative time was 40 ± 18 minutes. 33 punctures were supracostal, 31 were infracostal and 6 patients had both supra and infracostal punctures. Two patients had multiple stones in upper pole calyceal diverticulum. All procedure was done under general anaesthesia (GA) with the patient in prone position and fluoroscopy guided puncture after retrograde placement of ureteric catheter. Exit was tubeless (only DJ stent) in 90 % of patients (63/70) while 7 patients (10%) were managed totally tubeless (no DJ stent / nephrostomy). Two patients (2.8%) required intercostal tube drainage after the procedure before extubation for hydro/pneumothorax based on clinical examination. 68 patients (97%) became stone-free at the time of discharge (Ultrasound / Xray) and 69 patients became stone-free at the time of stent removal. No patient had significant blood loss requiring transfusion. **CONCLUSION:** PCNL through upper pole calyx is safe and efficacious with minimal morbidity or complication.

Podium Session 14: ANDROLOGY AND INFERTILITY 1

POD 14 – 01

Total phallic reconstruction from female to male Sex Reassignment Surgery, Our experience

Gaurav Kasat, Mukund Jagannathan, Ajit Sawant, Maqsood, Vikash Kumar, Prakash Pawar, Kunal Atrekar

Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai

Introduction and objective- Female to male transsexual surgeries are indicated when penile development is deficient, loss of penis or gender dysphoria. Main goal of surgery is cosmetically acceptable, penetrable phallus and functional voiding urethra. Objective is to describe 1st stage urethral lengthening surgery followed by 2nd stage phalloplasty. And management of neourethral complications. **Methods-** Institutional study was done in four patients which were operated by Urology department

for first stage urethral lengthening with urethral advancement followed 3-5 months later by plastic surgery department for second stage radial artery-based forearm free flap with tube within a tube using forearm skin, with the urethra fashioned from the non-hair-bearing area. Results-Four patients with 12 months follow up suggest that three patients have normal urine flow rate without any urinary tract complications with good phallus cosmetic acceptance. One patient developed obstructive symptoms after 6 months of surgery. Which on further evaluation shows narrowing at proximal phallus which was treated by laser fulguration. This patient requires regular endoscopic dilatation. This on follow up 3 months shows normal flow. Conclusion- First stage urethral advancement surgery followed by second stage radial artery-based forearm free flap surgery have normal cosmetic outcome with good urine flow and voiding pattern with less complications rate. Advantage being urethral advancement related complications can be managed early after first stage without disturbing phallus.

POD 14 – 02

To study the efficacy of Sildenafil as monotherapy vs combination of Sildenafil and atorvastatin in patients with erectile dysfunction

Tuli A, Francis SK, Jaiswal A, Parikh A, Shah V, Mammen KJ

Christian Medical College, Ludhiana

Introduction and objective: Erectile dysfunction (ED) is defined as consistent or recurrent inability to attain and / or maintain penile erection sufficient for sexual performance. The aim of the study was to compare the efficacy of Sildenafil Citrate 50 mg used as monotherapy with Sildenafil Citrate 50 mg + Atorvastatin 40 mg as combination therapy for the treatment of ED. Methods: This is a prospective study conducted from July 2009 to July 2014. Results: A total of 43 patients were enrolled for the study. Most common (11/43, 25.8%) age group was 31-40. 60%(27) patients had arterial cause, 30%(13) psychogenic, 6%(2) venous and 3%(1) both arterial and venous insufficiency. 9.75%(4) patients had severe ED before entering the study, 21%(9) had moderate ED, 63%(26) had mild to moderate ED and 9.75%(4) had mild ED according to the standard IIEF-5 questionnaire. Mean cholesterol and triglyceride value was high in 51-60 years, LDL in 41-50 and 61-70 years age group. Higher triglyceride and LDL values were associated with increased severity of erectile dysfunction. Mean fasting blood sugar (FBS) was high in 61-70 years age group associated with severe ED. Mean IIEF score before entering the study was 10.8 which improved to 13 with sildenafil therapy used as monotherapy which further improved to 16.7 with combination therapy. Conclusion: Combination therapy using sildenafil and atorvastatin improves IIEF score in patients with erectile dysfunction.

POD 14 – 03

Outcomes of microsurgical subinguinal varicocele ligation in infertile couple

Sathe D K, Joshi P B, Vasana S S

Manipal Ankur Andrology and Reproductive Services, Bangalore

Introduction and objective Varicocele is seen in approximately 40% of infertile men. A microsurgical subinguinal approach with arterial preservation has been recommended in the adult infertility reports as the method with the greatest success rate. We report our experience about the outcomes of microsurgical subinguinal varicocele ligation in infertile couple. Methods A retrospective analysis of 786 patients who underwent microsurgical varicocele ligation at our institute between August 2001 and February 2008 was done. All patients underwent preoperative semen analysis, hormonal evaluation (FSH, LH, and Testosterone) and scrotal Doppler study. Post operative semen analysis was done at 8 weeks and monthly. Outcomes were assessed with post operative sperm concentration, motility and paternity rates. Results The average duration of infertility was 4.09 ± 2.7 years. The average preoperative sperm concentration was 10.51 million/ml and motility was in the range 26 to 35% (Rapid and slow progressive). Post operative semen analysis showed significantly improvement of 78% in sperm counts (p value 0.031) and of 62% in sperm motility (p value 0.048). 173 patients conceived naturally amounting to 28.64%. 150 out of 431 patients who opted for IUI conceived amounting

to 34.8%. 182 patient lost follow up. The postoperative follow-up period was variable and ranged from 8 to 36 months. Postoperative paternity was achieved in 323 patients (53.48%) Conclusions Microsurgical varicocele ligation in infertile men is definitely helpful in atleast 50% of couples

POD 14 – 04

Penile Endothelial Function and Microcirculation Assessment: A new diagnostic and prognostic tool

Vasana S S, Joshi P B, Sathe D

Manipal Ankur Andrology and Reproductive services, Bangalore

INTRODUCTION AND OBJECTIVES: This study is based on hypothesis "Endothelial function in penis is an important marker of erectile function and penile endothelial derangement is the earliest marker of penile dysfunction, being affected earlier than the endothelial function in other capillary beds". The hypothesis was to compare reactive hyperemia following brachial & cavernosal artery occlusion which would reflect endothelial function. Measuring endothelial dysfunction would facilitate diagnosis and prognosis in erectile dysfunction. METHODS: A prospective, nonrandomized study was done at our institute on 25 Erectile Dysfunction (ED) & normal subjects. We used device from Lea Medizintechnik based on the principle of laser guided tissue photospectrometry combined with a specially designed penile pressure cuff, microlaser probes for both corpora and control arm (hypothenar). Non-invasive assessment of real time blood flow in capillaries, oxygen saturation, hemoglobin filling and reactive hyperemia was done. Response on the hypothenar surface was assessed first following 5 minute suprasystolic brachial artery occlusion & Endothelial Function Index (EFI) was calculated by software. Flow prior to occlusion & hyperemia 1 minute after occlusion release was measured. A repeat measurement was done after 5 minutes. RESULTS: Controls displayed good endothelial function in hand & penis with similar EFI even on repeat testing. Eight ED subjects showed poor response both in arm & penis suggesting generalized endothelial dysfunction. Five ED subjects showed good EFI in arm and poor response in the penis suggesting early endothelial derangement in the penis. All subjects showed good retest repeatability. CONCLUSIONS: This test opens up the possibility to assess beyond penile vascularity & predict the prognosis of ED. Good retest repeatability establishes the accuracy of the device.

POD 14 – 05

MRI in Erectile Dysfunction: New Accurate diagnostic tool

Vasana S S, Joshi P B, Sathe D

Manipal Ankur Andrology and Reproductive services, Bangalore

Objective: Erectile dysfunction evaluation tools are limited and have limited sensitivity and specificity. The main challenge is replicating physiological erection and delineation of anatomy even with Power Doppler. MRI as a diagnostic tool in evaluation of erectile dysfunction (ED) has never been studied. We studied in patients with ED the diagnostic capability of MRI in terms of clinical application. Material and Method(s): We conducted a nonrandomized, prospective study in 25 patients diagnosed to have ED. All Patients had IIEF-ED Domain score recorded, underwent NPT and Penile Doppler. Based on these results, the patients were divided into 5 groups with 5 patients in each group. Group I - Arteriogenic, Group II - Venogenic, Group III - Neurogenic, Group IV - Psychogenic, Group V - normal (Control). Result(s): The plots in each group had specific pattern and we were able to define particular criteria - time to peak flow and intensity of contrast enhancement, which was used to differentiate various types of ED. MR Imaging in Flaccid State: MR Imaging after Intracavernosal injection: ED type Time to Peak(s) Intensity (rel) Pattern of Run Off Time to Peak(s) Intensity (rel) Pattern of Run Off Arteriogenic >120 <1000 Slow Decline >120 >1000 <1500 Slow Decline Venogenic <120 >1000 <1500 Rapid Decline <120 >1500 Rapid Decline Neurogenic <120 >1500 Rapid Decline <120 >2500 Rapid Decline Psychogenic >120 >1000 <1500 Slow Decline >120 >1500 <2000 Slow Decline Normal <120 >1000 Slow Decline <120 >2000 <3000 Slow Raise Conclusion(s): MRI of the penis provides objective definition of the various categories of ED that seems to be consistently reproducible. It defines the anatomy, physiology, mechanism of ED and quantifies the dysfunction. This study opens a new paradigm in diagnosis and treatment of ED.

POD 14 – 06**Evaluation of extra corporeal shock wave therapy in cases of peyronie's disease with erectile dysfunction: a preliminary report****Jain R J, Shimpi R K**

Ruby Hall Clinic, Pune

INTRODUCTION AND OBJECTIVE: The noninvasive treatment options for Peyronie's Disease(PD) are oral Potassium AminoBenzoate(POTABA), Intralesional steroids, Verapamil ointment etc, if there is no gross penile deformity. Apart from surgical treatment, there is no specific treatment for the plaques. In this preliminary report, I tried to evaluate the use of EXTRA CORPOREAL SHOCK WAVE THERAPY (ESWT) for painful erections and erectile dysfunction(ED). **METHODS:** 12 men aged 24-37 years treated between Jan 2011- July 2014 are included. 10 patients had a single plaque while 2 had 2 or more plaques. Those patients who had failed conservative treatment were included. Evaluation consisted of routine and specific investigations such as Color Penile Doppler and soft tissue xray of the penis. ESWT consists of 8 weekly treatment of 20 minutes duration at the intensity of 1 on OPD basis. The results were evaluated at baseline, 8, 12 and 24 weeks after the therapy. All patients continued Verapamil ointment thereafter. For evaluation, I employed International Index of Erectile Function(IIEF5), Visual Analogue Score(VAS). The treatment was well tolerated. **RESULTS:** 14 patients reported significant improvement of mean VAS score, mean IIEF5 score at 12 weeks and 24 weeks. The mean plaque size reduced by 1.2 -1.8 cm but the curvature degree did not improve significantly. 17 patients reported that the pain had significantly reduced after the therapy. **CONCLUSION:** ESWT can significantly improve the painful erections and to some extent ED in these patients.

Podium Session 15: ANDROLOGY AND INFERTILITY 2**POD 15 – 01****Efficacy of deep dorsal vein ligation with corporoplication in patients with venogenic erectile dysfunction****Joshi P B, Sathe D K, Vasan S S**

Manipal Ankur Andrology and Reproductive services, Bangalore

Introduction: Venogenic ED contributes to 1/3 rd cases of ED. Deep dorsal vein ligation and stripping is not universally accepted as the treatment of choice. We believe that laxity of tunica may also add to venous leakage. Therefore corporoplication along with DDV ligation may increase the intracorporal pressure effectively. **Aim:** To assess the efficacy of the DDV ligation with corporoplication in patients who were non responsive to PDE5 inhibitors in their highest doses or intracavernosal injection. **Material and Methods:** 55 pure venogenic ED patients were analysed prospectively. Duplex revealed persistent EDV >3cm/s despite PSV >25cm/s. After failure to respond to highest dose of PDE5i or ICI they were suggested DDV ligation with corporoplication after obtaining informed consent. Outcomes were assessed using IIEF ED, erection hardness score(EHS) and Clinical Global Impression of Change(CGIC) scores at 3 and 12 months. **Results:** Of the 55 patients, 30(54.6%) attained spontaneous erection good enough for penetrative intercourse. IIEF-ED scores improved from 9.9+2.23 to 23.8+1.99 and 23.06+1.48 at 3 and 12 months. EHS improved from 1.6+0.49 to 3.66+0.47 and 3.4+0.78 at 3 and 12 months. CGIC scores were 1.53+0.5 and 1.6+0.49 at 3 and 12 months. Of the 25(45.4%), 7(12.7%) patients did not show any improvement. 18(32.7%) patients had improved erection with only half dose of PDE5i to attain full rigidity. IIEF ED score changed from 9.7+2.3 to 18.8+2.62 and rigidity score changed from 1.38+0.5 to 2.5+0.51 at 12 months **Conclusion:** DDV ligation with corporoplication may be a good surgical procedure in select group. Larger numbers with longer follow up are required to understand the long term efficacy of the procedure.

POD 15 – 02**Priapism and chronic myeloid leukemia : our experience****Baheti V.H, Patwardhan S.K, Ismail M.A, Daga S.O, Toshniwal M.M, Kaje Y.D.**

KEM Hospital and G.S.Medical College, Mumbai

a)Introduction and objective: Chronic myeloid leukemia(CML) may present with atypical manifestations such as priapism, and the underlying diagnosis is revealed only on subsequent investigations. 12 young adults presented with priapism in last one year to our institute (7 with CML +2 with sickle cell disease + 2 post diagnostic papaverine + 1 unknown etiology). Prompt and comprehensive management of the patients reiterate the fact that a rare presentation like priapism can forewarn a more critical condition. We present series of seven cases, where priapism was initial presentation of CML. **b)Methods:** Patients presented to urology department with priapism since 2 to 5 days, on examination had gross splenomegaly, underwent corporal blood gas analysis, cbc, and other routine investigations. Detumescence was achieved by aspiration and distal corporoglanular shunt. Patients were followed up for three months. Patients were combinedly managed by haematologists and cytotoxic therapy initiated after diagnosing them as CML in chronic phase. **c) Results:** All the patients were young, presented late after 2 days, had high wbc count of > one lakh, complete detumescence was achieved in all with combination of aspiration, Winter's shunts and chemotherapy. Erectile function was preserved in 3/7 patients. **d) Conclusion:** Although uncommon presentation in CML, priapism is urological emergency. In all the cases there was initial lack of suspicion, splenomegaly missed on examination, delayed referral and failure to do simple tests like complete blood count. Management of priapism in CML is multidisciplinary and involves both urologists and haematologists. We underscore the utility of combined cavernous lavage + adjuvant alpha-1 adrenergic agonist+ Winter's shunt as initial therapy in priapism with this special etiology.

POD 15-03**Rare foreign bodies (thermometer & nylon thread) in urinary bladder during fertility evaluation****K Sreedhar, Kammela Sridevi, Syed Alimuddin, Azharuddin, Vittala Srishailesh, Dorai, V. Devaprasad**

Dr. Sreedhar's Kidney, Fertility, IVF Institute, Hyderabad

Key words: B.B.T= Basal body temperature, F.B.= Foreign body, MC= Menstrual cycle. A series of two rare foreign bodies were found during infertility work-up of young adults is presented. 1) A 25 year lady who is eager to conceive presented with dysuria of 4 days duration. She was told by her gynecologist that on 14th day of M.C., her B.B.T. would decrease coinciding with ovulation. Instead of going to clinic for temperature recordings, she bought a thermometer and started self-checking her vaginal temperatures daily (instead of oral temperature). On a fateful day, thermometer slipped into her urinary bladder and she couldn't retrieve it. She waited for 4 days expecting spontaneous expulsion of thermometer before coming for medical help. Her plain x-ray abdomen revealed intact thermometer in urinary bladder area. The lie of the thermometer was such that it did not permit natural expulsion through urethra. The lady was scared that with a thermometer inside her bladder, coitus would be dangerous to pelvic organs. The thermometer was removed by cystoscopy with F.B. forceps. Meticulous care was taken to prevent breakage of thermometer lest mercury would spill into bladder. Post-operative recovery was smooth and she was discharged next day. This is the first time in literature where a thermometer was found in the urinary bladder. This case emphasizes need to explain minute details of our advice, lest such misunderstanding could occur. 2) A 26 year old man planning to have children came with dysuria, poor stream, fever & hematuria for 6 months. His plain x-ray abdomen & ultra sonogram showed a 3cm. stone in urinary bladder. There was no history of injury, previous surgery or psychological problems. During endoscopic lithotripsy, stone lacked brittleness and whitish threads were seen after breaking major portion. After removing stone, the threads were found to be of nylon. There was no proper history as to how nylon threads have gone into bladder. It may be postulated that wire might have been passed by young boy several ago while playing or masturbating. It got entangled and formed nidus for stone after years. This case emphasizes the need to keep a close watch on young boys' playing objects, to prevent such long term complications. Both these persons had children subsequently with no sequelae due to foreign bodies.

POD 15 – 04**Microsurgical Vasoepididymostomy: A single center experience****Mahapatro BK, Choudhuri S.Mishra JJ., Pand SS., Swain S., Singh GP, Hota D.**

S.C.B Medical College & Hospital, Cuttack

Purpose - To evaluate the efficacy of vasoepididymal anastomosis using microsurgical single- suture longitudinal technique in cases of obstructive azoospermia in our center. **Material and methods**- Total 106 cases of obstructive azoospermia from Jan 2010- June 2014. Patients were selected basing on the clinical examinations, semen analysis and semen fructose and histopathology. Out of which 96 had undergone microsurgical vasoepididymal anastomosis using single suture longitudinal techniques.. The results were analysed after reviewing the semen analysis report after 3, 6, 9 and 12 months. Operative factors were also analysed and compared with the existing guidelines. **Results and Discussion**- Out of total, 10 cases found to be with fibrosed epididymis, thin atrophic vas and distorted structural anatomy due to previous scrotal surgery which were excluded. Out of 96, 26 cases had undergone hydrocelectomy. Six patients developed scrotal hematoma post-operatively which was managed conservatively. Out of all patients 35 (36.4%) cases were found positive for oligo/ normozoospermic after 3 and 9 month. **Conclusion** : though the success rate is not so high, microsurgical vasoepididymostomy is an useful procedure for obstructive azoospermia.

POD 15 – 05

Long term follow up of varicocele

Sanjay P Dhangar, R K Shimpi

Ruby Hall Clinic, Pune

INTRODUCTION AND OBJECTIVES:-Varicocele is an abnormal dilatation and tortuosity of the Pampiniform plexus of veins, can cause detrimental effects on spermatogenesis in the reproductive age and can reduce the size of the testes. **MATERIALS AND METHODS**:-60 patients in the age group of 22-30 (mean 27 years) treated between 2008-2012 are randomized in two groups. Group A (n=45) had grade II-III varicocele with strain pattern seen on spermatogram and the size of the testicle (left side) was smaller by a mean of 2.4 ml than the right side. All these patients underwent microsurgical varicocelectomy on both the sides. The control Group B also had varicocele Grade II-III with strain pattern seen on the spermatogram. All these patients of Groups A and B underwent Doppler study for the measurement of PSV, EDV and RI for the Capsular and Centripetal Arteries. The Colour Doppler of the arterial flow and measurement of the size of the testicle was repeated at 0, 6, 9, 18 months. **RESULTS**:-At the time of surgery in Group A, the RI of the Capsular Artery was 0.62 +/- 0.03 and that of Centripetal Artery was 0.58 +/- 0.03. One month after surgery, RI of Capsular Artery was 0.66 +/- 0.04 while that of the Centripetal Artery was 0.63 +/- 0.03, whereas there were minimum changes in the RI of the Capsular and Centripetal Arteries of Group B. **CONCLUSION**:-Because of venous hypertension in the Pampiniform plexus, there is a significant drop in testicular arterial perfusion. The Operative Treatment significantly improves the testicular arterial flow, and hence possibly improves the spermatogenesis. The RI in the Centripetal Artery is the main hemodynamic indicator that correlates with the improvement in the sperm quality.

POD 15 – 06

Should men with idiopathic obstructive azoospermia be screened for genitourinary tuberculosis?

Gupta Rajan, Singh Prabhjot, Kumar Rajeev

All India Institute of Medical Sciences, New Delhi

Introduction: Obstruction of the ductal system is responsible for approximately 40% cases of azoospermia. In the majority of Indian men with obstructive azoospermia and infertility, no cause can be identified. Tuberculosis (TB) is a known cause of infertility in India. We intended to assess the need of screening for genitourinary tuberculosis among infertile men with idiopathic azoospermia. **Materials and Methods**: Men diagnosed as idiopathic obstructive azoospermia were screened for tuberculosis with a semen PCR (Polymerase Chain Reaction) test. If the test was positive, confirmatory tests for tuberculosis were performed. Men with a clinical and laboratory evidence of TB were given standard antitubercular therapy (ATT) for 6 months and semen analysis was repeated at 6 months. **Results**: 100 patients who fulfilled the inclusion criteria were included in the study. Seven of these 100 subjects had positive semen PCR for tuberculosis and four of these 7 also had a low volume ejaculate. 18 patients had semen volume less than 1.5 ml and 4 of them had PCR positive. 3 of 7 patients

with PCR positive had physical findings suggestive of tuberculosis and one patient had history suggestive of tuberculosis. 4 patients received ATT and none of them showed improvement in any of the semen parameters. **Conclusion**: Screening for tuberculosis may not be indicated in men with idiopathic obstructive azoospermia without physical evidence or history of untreated TB. It has a low yield and does not change clinical management.

Podium Session 16: URO ONCOLOGY 1

POD 16 – 01

Identifying optimal candidates for active treatment among patients diagnosed with metastatic prostate cancer: a population based study

Abdollah, F, Fossati N, Sood A, Sammon JD, Peabody JO, Bhandari M, Menon M

Henry Ford Hospital, Detroit, MI, USA

Objective: Definitive treatment to the prostate in men diagnosed with metastatic prostate cancer (mPCa) suggested a survival benefit in a recent large population-based study. To identify mPCa patients who would benefit the most from active treatment to the prostate. **Methods**: Men with documented stage IV (M1a-c) mPCa at diagnosis were identified using SEER (2004-2009) and divided according to treatment type: active treatment (AT, either radical prostatectomy or radiation therapy) vs. non-active treatment (NAT, either androgen deprivation therapy or observation). Regression tree analysis (RTA) was used to develop a cancer specific mortality (CSM) risk-stratification tool. Kaplan-Meier plots were used to depict CSM-free survival according to treatment option, after stratification into risk group category previously defined through RTA. **Results**: A total of 5,219 mPCa patients were included. Of these, 444 (9%) were treated with AT, while 4,775 (91%) underwent NAT. At RTA, PSA at diagnosis (≤ 55 vs. > 55 ng/ml), Gleason Score (≤ 7 vs. ≥ 8), and Metastasis Stage (M1a-b vs. M1c) allowed identifying five risk group categories. At 5-years, AT significantly improved CSM-free survival compared to NAT only in the first risk group category (91% vs. 64%, $p < 0.001$). The latter was defined as PSA at diagnosis ≤ 55 ng/ml and Gleason Score ≤ 7 ($p < 0.001$). This was confirmed in multivariable analysis, where AT was independent predictor of higher CSM-free survival (HR: 0.23; $p < 0.001$) in this risk group. Conversely, no significant survival improvement was found among the other four risk group categories (all $p > 0.05$). The major limitation was the lack of information from SEER about comorbidities and systemic therapies. **Conclusions**. Among mPCa, only patients with PSA at diagnosis ≤ 55 ng/ml and Gleason Score ≤ 7 significantly may benefit from active local treatment to the prostate. These results should serve as a foundation for future prospective trials

POD 16 – 02

Androgen deprivation therapy and increased non-cancer mortality in prostate cancer patients: analysis of the number need to harm

Abdollah F, Sood A, Sammon JD, Peabody JO, Bhandari M, Menon M, Trinh Q-D

Henry Ford Hospital, Detroit, MI, USA

Objectives: In prostate cancer (PCa) patients, the relationship between androgen deprivation therapy (ADT) and other-cause mortality (OCM), and the magnitude of this potential relationship has not been fully elucidated. We sought to examine and quantify the association of ADT with OCM in PCa patients treated with primary ADT, prostatectomy, or radiation. **Methods**: A total of 137,524 patients with non-metastatic PCa treated between 1995 and 2009 within the Surveillance Epidemiology and End Results Medicare-linked database were included. Cox-regression analysis and the number needed to harm (NNH) were used to respectively test and quantify the association of ADT with OCM. A 40-item comorbidity score was used for adjustment. **Results**: Overall, 9.3% of patients harbored stage III-IV disease, and 57.7% of patients received ADT. The mean duration of ADT exposure was 22.9 months (median: 9.1; IQR: 2.8-31.5). Mean and median follow-up were 66.9, and 60.4 months, respectively. At 10 years, overall OCM rate was 36.5%; it was 30.6% in patients treated without ADT vs. 40.1% in patients treated with ADT ($p < 0.001$). This translated into a number need to harm (NNH) of 10.5. In multivariable analysis, ADT was associated with an increased risk of OCM (hazard ratio: 1.11, 95% confidence interval: 1.08-1.13). Patients with

no comorbidity (10-year NNH: 11.1) were more subject to harm from ADT than patients with high comorbidity (10-year NNH: 21.3). Conclusions: In patients with PCa, treatment with ADT may increase the risk of mortality due to causes other than prostate cancer. The NNH was 10.5. Whether this is a simple association or a cause-effect relationship is unknown and warrants further study in prospective studies.

POD 16 – 03

Peri-operative outcome of partial nephrectomy for renal cell carcinoma: does indication matter?

Vivek Venkatramani, Santhosh Kumar, Antony Devasia, Nitin S. Kekre

Christian Medical College, Vellore

Introduction and Objectives: To review nephron-sparing surgeries for renal cell carcinoma in order to determine whether perioperative outcomes varied with the indication of surgery. **Methods:** Between January 2004 and December 2013, 184 consecutive partial nephrectomies for pre-operatively suspected renal cell carcinoma were retrospectively included. Absolute indications included chronic renal failure, bilateral tumours or solitary kidney. Relative indications included comorbid illnesses with potential to affect renal function. Elective indications included patients without risk factors. Complex tumours were defined as size >7cm, multiple, hilar and endophytic tumours. Standard tests of significance were applied. **Results:** Mean age was 51.1 years and male-female ratio was 4:1. Median follow-up was 17 months (range 3-100 months). Thirty-nine patients had chronic renal failure. Twenty-two had bilateral tumours. Absolute indication group included 58 patients, while relative and elective indication groups had 63 patients each. Patients in absolute indication group were older, had significantly lower hematocrit and albumin, and higher baseline creatinine ($p < 0.001$). Complex tumours were equally distributed. Absolute indication group had significantly larger tumours (5.03 vs 4.29 vs 3.72cm, $p = 0.000$), multifocal tumours (10.2% vs 1.6% vs 1.5%, $p = 0.001$) and tumours $\geq T2b$ (6.8% vs 5.4% vs 0%, $p = 0.032$). Perioperative complications of mean blood loss, transfusion rate, intra-operative stenting, post-operative interventions and rise in serum creatinine were similar between groups. Recurrence was significantly more in patients with absolute indications. **Conclusions:** Despite worse baseline patient and tumour characteristics, peri-operative complications in patients with an absolute indication were comparable to those with relative and elective indications.

POD 16 – 04

Making life easier for the patients with ileal conduits

Khochikar Makarand V

Siddhi Vinayak Ganapati Cancer Hospital, Miraj

Introduction and objective: Though ileal conduit is considered 'gold standard' as a diversion procedure after radical cystectomy, there are many limitations to quality of life. Innovations in the surgery and post operative care can improve upon this. **Methods:** In a series over 350 radical cystectomies various innovations were made to avoid the complications of stoma and stoma related quality of life. Making the longer intussusception of loop, siting at the desired site, using the innovative clothings, use of devices in order to allow them to bathe daily and allow them to swim in swimming pool were such innovative ideas. **Results:** Excellent quality of life was experienced by the subgroup who underwent these procedures and used the devices as per the need. The satisfaction questionnaire sheet revealed an average score of 8/10, in 82% of the patients. **Conclusions:** Living with urostomy is not very easy. These surgical innovations and use of special devices make their own life and social life much better.

POD 16 – 05

Evaluation of the long term complication rate after radical cystoprostatectomy with kochs ileal conduit : a 5 year analysis.

Siddalingeshwar C Doddamani, Fredrick Paul, Satish Kumar, Suresh Bhat

Government Medical College, Kottayam

Introduction Bladder cancer is the ninth most common cancer diagnosis worldwide accounting for 5% of all diagnosed cancers. Out of this 70%

are diagnosed as nonmuscle invasive bladder cancer (NMIBC) and 30% as muscle invasive bladder cancer (MIBC). Radical cystectomy remains the standard treatment for muscle-invasive carcinoma bladder. But on long term followup of these patients a wide range of complications are encountered and hence the correct assessment of the occurrence rate of these complications in order to devise an appropriate follow up protocol is of great significance. **Objective** To evaluate the long-term outcomes beyond 1 year, both functional and oncological, in male patients treated with radical cystectomy and Kochs ileal conduit diversion for invasive bladder cancer. **Patients and methods:** This is a retrospective study done at Government Medical college, Kottayam. A total of 82 patients underwent radical cystectomy and kochs ileal conduit diversion for invasive bladder cancer over a period of 5 years between 2009 to 2013, out of this 66 patients turned for follow up with minimum follow up of 1 year. The tools used to assess the complications during each visit included; history, examination including per rectal assessment, laboratory investigations including electrolytes, urine analysis and kidney function tests, pH (acidosis) and bicarbonates and radiological investigation including ultrasound, chest X-ray, CT abdomen and pelvis **Results** The mean follow up was 36 months (range 12-48). Stomal complications like stomal stenosis was seen in 2 cases (3.4%), parastomal hernia 2 cases (3.4%). Metabolic acidosis was seen in 10 cases (14%). Stones developed post-operatively in 6 patients (all of them were renal stones), incision hernia developed in 16 patients (27.5%), uretero enteric anastomotic stricture in four patients (6.8%), recurrent UTI was recorded in 10 cases (17.2), metastasis was recorded as follows: local 2 cases (3.4%), distant in 2 cases (3.4%) and the mortality rate was 17% (over all survival was 83%). **Conclusion** Ileal Conduit patients after radical cystectomy on follow up tend to have a high rate of non-fatal complications. Being cured from the primary cancer, they still need to be closely followed up especially for stomal complications

Podium Session 17: URO ONCOLOGY 2

POD 17 – 01

Is Gleason 6 is reliable in prostate biopsy?

Deepak Rathi, Anandan Murugesan, Narmada Gupta, Gagan Gautam, Rajiv Yadav, Rakesh Khera, Rajesh Ahlawat

Medanta Medicity, Gurgaon

Introduction: The decision for management of carcinoma prostate depends on age, longevity of life, Gleason score and stage. Since preoperative biopsy is a sample of the prostate, sampling errors are possible. In the retrospective review of the pre operative needle biopsy histopathology and the prostatectomy histopathology, we analysed the change in the Gleason score between the two specimens. **Materials and methods:** All the patients who underwent RARP in our institute in the time period between Feb 2010 and July 2014 were included in the study. The pre operative needle biopsy Gleason sum was compared with the post op Prostatectomy specimen biopsy Gleason score. **Results:** A total of 512 patients were available for the study. The pre op Gleason score showed 46.4 % of patients with Gleason 6 and 40.4% of patients had Gleason 7. Post op Gleason scoring revealed 20% of Gleason sum 6 and 54% of Gleason 7. 54% of Gleason 6 patients upgraded to Gleason 7 and 9% to Gleason 8 or more. **Conclusion:** Gleason score alone is not a reliable indicator as there is significant upgrading of Gleason sum from needle biopsy to gross specimen. The other factors such as PSA, clinical stage and longevity are also important. In future genomic studies will be helpful.

POD 17 – 02

Single centre experience of renal cell carcinoma with ivc tumor thrombus: a 10 year surgical experience

Cheran Govalan, Appu Thomas, Sanjeevan K V, Ginil Kumar, Georgie Mathew, Balagopal Nair, Kannan Nair

Amrita Institute of Health Sciences, Kochi

Introduction and Objectives Radical surgical resection for RCC with IVC thrombus, even though technically challenging remains the definitive curative/palliative treatment in those without significant metastases. As much data was not available from the Indian population,

in this patient group, we set out to review and share our experience in this context. Methods: From September 2004 to August 2014, 23 patients with RCC and IVC tumour thrombus underwent surgery at our institution. Tumor thrombus was infrahepatic/ level II: n = 18, intrahepatic/level III: n = 5. Infra- and intrahepatic caval tumors were resected using an abdominal approach, liver mobilization technique without cardiopulmonary bypass (CPB). 4 patients underwent IVC reconstruction with graft. CPB was used in only one case, who had intraoperative pulmonary embolism which needed thoracotomy. A retrospective analysis of patients presenting symptoms, peri-operative blood loss, CPB usage, peri-operative complications, tumour grade/stage, level of IVC thrombus and patient survival was done. Results Of the 23 patients operated, the mean age of presentation was 52years(20-86 yrs). 5/23 were incidentally detected to have tumour; 12/23 had haematuria and 13/23 had abdominal pain as presenting symptom. 21/23 had right sided lesion. 4/23 patients needed IVC reconstruction. 1/23 patient required CPB. Average intra-operative blood loss was 870ml; Average hospital stay of 12 days. Only 1 patient had metastasis at presentation. The majority were Fuhrman grade 3 lesions (9/23) and clear cell type (14/23); Tumour thrombus level were infrahepatic (18/23) and intrahepatic (5/23). There were 2 peri-operative complications and 1 peri-operative mortality. On follow-up 12/23 had not developed, any metastasis or recurrence with an Overall survival of 60%. Conclusion Surgical treatment of RCC involving the IVC is possible with acceptable morbidity and mortality. Adequate Liver mobilization techniques to access the retro hepatic IVC can reduce the need for cardiopulmonary bypass and help in complete IVC thrombus removal and IVC repair in case of IVC wall involvement. Resection of IVC and replacement with graft can improve the resectability of tumour. Long-term survival can be expected in over 60% of non-metastatic patients at 3 years. These cases benefit from a proper evaluation; multidisciplinary surgical approach and regular follow up.

POD 17 – 03

Comparison of Contrast Enhanced Color Doppler Targeted Biopsy to Conventional Systematic Biopsy in Carcinoma Prostate

Pugazhenthii P, Sivabalan, Saravanan, Karunamoorthy, Ilamparuthi, Selvaraj, Thiyagarajan

Madras Medical College, Chennai

AIM To assess the efficacy of contrast enhanced color Doppler ultrasound guided biopsy to detect prostate cancer And to compare with conventional systematic biopsy and the impact on gleason score. MATERIALS AND METHODS Prospective study, January 2013 – August 2014, conducted in Department of Urology, Rajiv Gandhi Govt Government Hospital ,Madras Medical College, Chennai-3. In this study 25 patients with abnormal DRE or elevated PSA were included. SONOVUE ultra sound contrast used for this study. Targeted core biopsy is taken from contrast enhanced areas after administration of UCA. The same patient underwent systematic biopsy, histopathological study was done to detect the presence of cancer foci and Gleason grading was assigned to each core of biopsy and compared. OBSERVATION AND RESULTS Totally 25 patients, 41 – 80 years with a mean of 62.2 years. A total of 35 cores were taken from contrast enhanced areas out of which 26 cores were positive for malignancy. Out of 200 cores taken by systematic biopsy, 30 cores were positive. Separate Gleason score was given to each of the cores from contrast enhanced areas as well as systematic biopsy cores. Biopsy from contrast enhanced areas showed a Gleason score of 8 in 2 patients, 7 in 9 patients, 6 in 3 patients, 5 in 6 patients and 3 in 1 patient. Out of 25 cases, 21 cases were positive for malignancy by contrast enhanced biopsy and 4 patients were negative for cancer. Out of this 4 patients, 3 were BPH and 1 showed high grade PIN. In the systematic biopsy group, Gleason score of 6 and 7 were present in 4 patients each, a score of 5 in 7 patients and 3 in 2 patients. For baseline TRUS ,sensitivity was 40 % (12 /30) with specificity of 91.7%(156/170).For contrast enhanced ultrasound ,sensitivity was 100 % (26/26) but specificity was 56%(5/9). Conclusion The results if this study shows that the sensitivity and accuracy of cancer detection, is improved by using ultrasound contrast agents for depicting microvessels in carcinoma prostate.

POD 17 – 04

Can whole-body magnetic resonance imaging with diffusion-weighted imaging replace tc 99m bone scanning for detection of metastases in patients with high-risk prostate cancer?

Vaidya Y, Desai K, Shah S, Shukla K, Chinnannvar P, Sevag M, Singh V

Civil Hospital and B.J. Medical College, Ahmedabad

INTRODUCTION : Technetium tc 99m bone scintigraphy (BS) is universally recommended for detecting prostate cancer metastases in cancer of all stages MRI and WB-MRI are superior to BS for detection of bone metastases , because they detect cancer cells in the bone before bone remodelling has occurred MATERIAL & METHODS : This study compares the diagnostic performance of whole-body magnetic resonance imaging with diffusion-weighted imaging and technetium Tc 99m bone scintigraphy (BS) in detecting high risk prostatic cancer metastases. Fourty five consecutive prostatic cancer patients at high risk for metastases (serum PSA more than 20 ng/ml and gleason score of 8 or more) prospectively underwent whole-body magnetic resonance imaging with diffusion-weighted imaging and technetium tc 99m bone scintigraphy (BS). Age ranges from 56 to 76 years. RESULTS: Bone scan showed no evidence of metastasis in 30 patients, 12 patients had bone metastasis and 3 patient had equivocal lesion in lumbar vertebra which was ruled out as whole body MRI showed no evidence of metastasis. Out of these 1 patient had metastasis in brain detected by whole body MRI. Negative predictive value of BS is 91 % and for WB MRI is 100%. Sensitivity for BS is 80% while specificity is 91% . For WB MRI sensitivity and specificity is 100% . Positive predictive value for this study is 0.01 that is highly significant. CONCLUSION: WBMRI can replace the current multimodality metastatic work-up for the concurrent evaluation of bones and lymph nodes in high-risk prostate cancer patients.

POD 17 – 05

Prevalence and pathological analysis of adenocarcinoma prostate discovered incidentally in radical cystoprostatectomy specimens: A review

Priyank Bijalwan, Balagopal Nair, Appu Thomas, Ginil Kumar, KV Sanjeevan

Amrita Institute of Medical Sciences, Kochi

Introduction: Radical cystectomy is the gold standard treatment for muscle invasive bladder cancer. Recently however, with improved survival rates, interest has surrounded total or partial prostate sparing cystectomy in well selected patients, with a view to improved quality of life. Studies have reported high rates of continence and retained erectile function following prostate sparing surgery. The drawback of techniques such as partial cystectomy or prostate sparing cystectomy is the unknown risk of prostatic adenocarcinoma within the prostate. Cystoprostatectomy specimens obtained from patients with bladder cancer provide a unique opportunity to estimate the prevalence and to define the morphological features of silent (incidental) adenocarcinoma of the prostate. In this retrospective analysis, we aimed to determine the prevalence and mean Gleason Score for prostatic adenocarcinoma detected incidentally in cystoprostatectomy specimen. Patients & Methods: Between 2003 and April 2014, 123 patients underwent radical cystoprostatectomy for invasive bladder cancer at AIMS. Of these, 113 patients were male with a mean age of 63 years. The histopathology reports (cystoprostatectomy specimen) of these patients were reviewed. Results: Overall the prevalence of incidental prostatic adenocarcinoma was 12.4% (14 out of 113 Patients) with a mean Gleason Score of 6. 5 out of 113 patients had evidence of isolated high grade PIN or ASAP on histopathology. Conclusion: The reported rate of concurrent CaP and bladder cancer is highly variable which can be attributed to the different sampling approach adopted to process the prostate in cystoprostatectomy specimens. The clinical significance of these incidentally discovered cancers remains questionable because the outcome of patients with both malignancies depends on the prognosis of the bladder tumor. In the preoperative setting, candidates for a prostate sparing approach should be screened for CaP. In the absence of sufficient data to make firm recommendations,

when CaP is incidentally discovered, it seems prudent to include CaP surveillance in the follow-up

POD 17 – 06

Pitfalls in abiraterone therapy in castrate resistant prostate cancer (CRPC)

Pradhan Aditya, Rana YP Singh

BLK Super Speciality Hospital, New Delhi

Introduction : In CRPC despite 2nd line hormonal manipulation and chemotherapy the median overall survival was until recently less than 2 years . Abiraterone acetate is a recent agent for use in CRPC for improving survival and delaying progression. Flares in PSA and Bone Scan are reported in the early phase of treatment. In this study we analysed the response patterns in patients of CRPC after Abiraterone therapy **Material & Methods :** We retrospectively analyzed the data of 20 patients of CRPC treated over a period of 24 months and followed up for 12 to 22 months. Of the 20 patients , 5 were chemotherapy naïve and 15 patients were Post docetaxel therapy. In all cases the dose was 1 gm Abiraterone with 5 mg Prednisolone twice daily. Therapy was stopped either due to serious side effects or disease progression. Post therapy response was documented by monthly PSA ,clinical response and Bone scan every 3 months **Results :** The median age was 76.0 years. The median pre-treatment PSA and Gleason score in the overall population were 146 ng/mL and 7.5 respectively. Hepatic failure seen in 2 patients (10%). There was PSA flare in 24% of patients , stable response seen in 60 % and in the remainder there was disease progression. All patients with initial flare were continued on treatment and eventually remained stable for a mean of 6.6 months **Conclusion :** PSA flares encountered while on Abiraterone therapy need to be recognised and treatment continued to achieve therapeutic benefit.

Podium Session 18: URO ONCOLOGY 3

POD 18 – 01

A study of association of low serum testosterone and prostate cancer behaviour

K. Sudhakar, JVS Prakash, J Sivabalan, K.Thiyagarajan, V.Selvaraj C. Ilamparithi

Madras Medical College Chennai

OBJECTIVES: TO DETERMINE THE ASSOCIATION OF LOW TESTOSTERONE AND PROSTATE CANCER BEHAVIOUR **PATIENTS AND METHODS:** Biopsy proven prostate cancer patients 100 in number from June 2011 to June 2014 were enrolled in this study. serum testosterone of all these patients were measured. Based on serum testosterone two groups were made GROUP A with <250 ng/dl and GROUP B with >250 ng/dl.all prostate cancer patients were assessed based on clinical examination,complete baseline blood investigation, serum psa serum testosterone TRUS biopsy and imaging studies (CECT/MRI,Bone scan,chest xray) patients were managed with appropriate treatment based on their staging. **students t test and chi square test was applied to compare the prostate cancer parameters** **RESULTS:** The low testosterone group found to have high psa (74%)and also high Gleason score (82%)compared to group B .The preoperative tumor staging and post operative Gleason score were also high in group A .surgical margin positivity , extra capsular invasion and seminal vesical invasion were also found statistically significant in group A . **CONCLUSIONS:** serum testosterone should be considered along with sr.PSA to improve the prostate cancer management

POD 18 – 02

Early experience and operative outcomes of robotic-assisted partial nephrectomy - A single surgeon series

T B Yuvaraja, Nikhil Dharmadikari, Harshavardhana Rao, Abhinav Pednekar, Amit Patil, Nikhil Gunavane

Kokilaben Dhirubhai Ambani Hospital, Centre for Cancer, Mumbai

Background: The acceptance of robotic-assisted partial nephrectomy (RPN) is increasing among urologists. We report single-surgeon initial experience

with RPN and evaluates perioperative, pathological and short term oncological outcomes. **Methods:** Data collected on the first 42 consecutive patients to undergo RAPN by a single surgeon were reviewed. 41 were transperitoneal and one retroperitoneal RPN have been performed on 41 patients and three were bilateral. Demographic, perioperative, tumour characteristics and Clavien complications were collected in addition to oncological follow-up and renal function monitoring. **Results:** Mean age was 55 years (42-68), body mass index was 26.1 kg/m² (21.2- 31.3) mean tumor size was 4.1 cms (2.2-5.5) and Padua score was 6 (5-9). Average console time was 150 mts (120-184), no conversion to open surgery or pure laparoscopy. Mean blood loss was 100 ml (50-140), mean warm ischemia time was 17 mts (12-22) and length of hospital stay was 5 days (4-7). There were no mortality, and three Clavien 2 complications and one patient had hematuria on third day (Clavien IIIa) which required angioembolization. Surgical margins were negative in RPN, estimated GFR after three months of surgery was not decrease significantly. With mean follow up of 13 months (2-24) none of patients with RPN had recurrence or metastasis. **Conclusions** Robot assisted partial nephrectomy is well tolerated with acceptable ischemia time, less blood loss and better margin status. Our initial experiences is encouraging but more number of cases is required to draw conclusions.

POD 18 – 03

Triangular flap incision for difficult renal tumours

Gunil Kumar

Amrita Institute of Medical Sciences, Kochi

AIM: To improve the exposure during surgery for difficult renal tumours. **Method:** A right angled incision in the upper abdomen gives better exposure to large and difficult renal tumours.The abdominal muscle flap can be reflected on to the chest wall . This incision is a modification of the Reverse L incision explained for liver transplantation. Total 12 patients were managed through this incision from 2011 to 2014. The difficult renal tumours cases were approached through this included 1) para aortic lymphadenectomy upto the crus of diaphragm with left radical nephrectomy 2) IVC infiltration by renal tumour recurrence where an IVC graft was required 3) distal pancreatectomy with radical nephrectomy for local infiltration by renal tumour, 4)A case where a Renal tumour with IVC thrombus patient required aortic valve replacement . 8/12 patient underwent radical nephrectomy along with IVC exploration for IVC thrombus. **Result:** This incision was extremely useful in all the difficult scenarios. The exposure was better in all the cases and the complicated tumour could be managed without complications. There was no post operative wound complications in the patient group. **Conclusion** Triangular flap incision provide excellent exposure and difficult renal tumors can be managed with better comfort.

POD 18 – 04

Retroperitoneal lymph node dissection in post chemotherapy residual masses in advanced testicular germ cell tumor in Indian population: A single centre experience

Singh Prabhjot, Yadav Siddharth, Kumar Ashish, Mahapatra Sanjay, Dogar PN, Seth Amlesh

All India Institute of Medical Sciences, New Delhi

Introduction : Testicular tumors are rare and with current multimodality approach they are one of the most curable solid tumors. Significant number of patients with advanced disease (stage IIb-III) treated with chemotherapy have residual masses most commonly in retroperitoneum with normal serum tumor markers. These patients should undergo retroperitoneal lymph node dissection with curative and prognostication intent. **Material and methods:** We retrospectively studied patients who underwent post-chemotherapy retroperitoneal lymph node dissection at our institute over a period of 9 years. **Results :** Total number patients studied were 35 including 29 patients after primary chemotherapy and 6 patients following salvage chemotherapy over a period of 9yrs. Mean age of our patient group was 26.8yrs with primary tumor on right side in 18 (51.42%) and bilateral in 3 (8.51%). Mixed germ cell tumor was most common histology 18 patients (51.4%) and post chemotherapy mass was most commonly in paraaortic region 14 patients (40%). Fourteen patients (40%) required an adjunctive

procedure most commonly nephrectomy in 9 patients (25.7%). We noticed 25 complications mostly Clavien Dindo grade II and adjunctive procedures and complications were found to be more common in patients with >5cm residual masses or fibrosis on final histology. Residual mass was necrosis in 17 (48.57%), teratoma in 12 (34.28%) and viable tumor in 6 (17.14%) patients. Conclusion: Technical advances and better understanding of retroperitoneal anatomy has brought down the complication rates to acceptable levels encouraging its widespread and liberal use and greater role as a part multimodality approach to testicular tumors

POD 18 – 05

Modified lateral cutaneous ureterostomy: a palliative diversion in genitourinary and pelvic malignancy

Mittal Varun, Mandhani Anil, Kapoor Rakesh, Srivastava Aneesh, Ansari M S, Sureka Sanjoy, Patidar Nitesh

SGPGIMS, Lucknow

Introduction and Objective: We present the outcome of modifications as extreme lateralization of the stoma in cutaneous ureterostomy. **Methods:** Between June 2011 and June 2014, 11 patients had modified cutaneous ureterostomy. After closing peritoneum, retroperitoneal transureteroureterostomy was done. Right or left ureter was taken out at anterior axillary line between iliac crest and lower rib cage, instead of spinoumbilical line. Wide mouthed stoma was made taking a 'V' shaped skin flap into spatulated ureteral end to prevent stomal stenosis. Two ureteral stents were used in all patients for 2 weeks. Peri-operative morbidity and mortality were evaluated. All patients were followed 3 monthly for complications of ureterostomy. **Results:** Of 11 patients, 9 were post radical cystoprostatectomy (2 had nephroureterectomy also); one each had locally advanced carcinoma prostate and carcinoma cervix with frozen pelvis and renal failure. Only two patients developed stomal stenosis at 14 and 16 months. One patient had stomal revision and was kept on regular DJ stent change. The other patient was kept on self dilatation with 10 french feeding tube with good results. Two patients died with functional ureterostomy at 1 month and 6 month. Rest of 7 patients is doing well without any complications at a median follow up of 7 months (range 1 – 29 months). None of the patients had any problem related to urostomy application. **Conclusions:** Modified lateral cutaneous ureterostomy gives relatively straighter and shorter retroperitoneal course of ureter and avoids use of bowel in selective patients. Stoma, flush to the skin did not hinder with application of stoma device.

POD 18 – 06

Role of duloxytene in managing urinary incontinence after radical cystectomy and orthotopic neobladder: a prospective randomised control trial

Kumar Manoj, Mandhani Anil, Arora Sohrab

Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow

Objective: Duloxytene has been used for stress incontinence in females but there is paucity of literature about the effect of Duloxytene in managing urinary incontinence after radical cystectomy and orthotopic neobladder (RC). Aim of the study was to evaluate the efficacy and safety of Duloxetine in managing urinary incontinence after RC. **Methods:** A prospective randomized study on 31 patients was done between July 2011 and January 2014. Patients were randomly assigned to control group (14 patients) and study group (17 patients). Catheter was removal at 3 weeks and urinary leak was quantified by weighting the incontinence pad in 24 hours. In control group patient were taught only the pelvic floor exercises and in study group patients was given Duloxytene 40 mg twice daily along with pelvic floor exercises. Patients were reassessed at 4 weeks and 8 weeks for urinary leak. **Results:** Mean age was 56.48 years (range: 39-68 years). In study group, mean weight of incontinence pad was decreased from 935.29 gm +/- 242.87 SD to 391.18 gm +/- 117.57 grams at 4 weeks and 132.35 gm +/- 82.80 at 8 weeks. In control group this reduction was 1003.57 +/- 291.8 SD to 610.7 +/- 163.1 SD at 4 weeks to 357.1 +/- 93.76 SD. The difference was significant (p < .005). A total 4 in study group and 1 patient in control group were totally continent at 8 weeks. This difference was significant (p < .001). Side effects observed were mild and included fatigue, dry mouth, nausea, or insomnia. **Conclusion:** Our data indicate that Duloxytene is

safe and effective to gain early continence after radical cystectomy and orthotopic neobladder.

Podium Session 19: UROLITHIASIS 1

POD 19 – 01

Single stage extracorporeal short wave lithotripsy: a new formula to predict outcome

Luqman Ahammed P, Vikram Nimboor, Yunus K.K, Anoop K Sankar, Aby Madan, M. Nazar

Govt. TD Medical College Alleppey

Introduction: Ensuring stone free status after ESWL is still difficult. Objective assessment of stone characteristic using noncontrast computed tomography (NCCT) like skin to stone distance (SSD), stone size and Hounsfield unit (HU) might help to predict the outcome. These factors were combined to develop a formula that could predict the success of single stage ESWL. **Objective:** To evaluate the role of NCCT in predicting ESWL outcome using a formula that has been computed as 'Stone size x SSD x HU / 100'. **Methods:** Eighty patients with uncomplicated renal or upper ureteric stones who underwent NCCT prior to ESWL was included in this study and the formula was analysed. Stones of size 0.5 to 2.5 cm, measured in maximum diameter were included in the study. About 2500 -3000 shocks were given (1Hz/18kvs) by Electrohydrolic machine. Stone remnant >4mm in size by NCCT after 6 wks was considered as residual stone. **Results:** The mean SSD, Stone size & HU were 8.9 cm SD 1.67 (6.6-14), 1.3 cm SD 0.4 (0.6 -2.3) & 709.52 HU SD 296 (240-1440) respectively. The mean score was 86.35 SD 51.2 (19.97 to 259). The sensitivity, Specificity, Positive predictive value & Negative predictive value were 94.44 %, 82.25 %, 85.00 % & 98.07 % respectively (P=0.007 by Chi square test). **Conclusion:** Pre ESWL score less than 100 has the probability of stone free rate more than 98 percent. This formula can be considered for optimising patients for single stage ESWL in renal and upper ureteric stones with stone size < 2.5cm.

POD 19 – 02

A novel stone grading system for percutaneous nephrolithotomy to predict stone free rate: a prospective study

Rohit Kumar, Pawan Vasudeva, Anup Kumar, Biswajit Nanda, Sanjeev Kumar Jha, Harbinder Singh, Gaurav Kumar

Safdarjung Hospital and VMMC New Delhi

AIM: To propose a novel stone scoring system which is reproducible, efficient and can be validated and to assess perioperative parameters by applying nephrolithometry score. As currently no standard method is available to predict stone free rate. **MATERIAL AND METHOD:** The stone score was developed through a published data review. Seven reproducible preoperative variable stone volume, hydronephrosis, number of involved calyx, number of stone, stone location, skin to stone distance and body mass index were taken into account on basis of intravenous pyelogram and noncontrast-enhanced computed tomography. **RESULT:** The stone score was the only factor that significantly and independently predicted the stone-free rate (P < .05). It was found to be reproducible, with good inter-rater agreement (P = .803). None of the other factors tested, including stone burden, hydronephrosis, number of involved calyx, number of stone, stone location, skin to stone distance and body mass index correlated with the stone-free rate. **CONCLUSION:** Stone score accurately predicted the stone-free rate after PCNL. It was easy to use and reproducible.

POD 19 – 03

Predictors of systemic inflammatory response syndrome following percutaneous nephrolithotomy

Arun Kumar P, Dinakarbabu, Karunamoorthy R, Chengalvarayan G, Ilamparuthi C, Selvaraj V, Thiyagarajan K

Madras Medical College, Chennai

INTRODUCTION AND OBJECTIVE: Sepsis remains one of the dreaded complications of percutaneous nephrolithotomy (PCNL). The

objective is to analyse prospectively the preoperative and intraoperative factors that predict the occurrence of systemic inflammatory response syndrome (SIRS) in patients undergoing PCNL so that we can aggressively manage those patients from the preoperative period itself and avert the dangerous complications. **MATERIALS AND METHODS:** A prospective study was carried out between August 2012 and March 2013, including all patients who underwent PCNL. Patients with infected collecting system, synchronous ureteric stones, stents or PCN drainage were excluded. Physical examination, urine analysis, urine culture and sensitivity, complete blood count, renal function test, X ray KUB, Plain and CECT were evaluated. Patients who developed any two or above of the following in the postoperative period were considered to have developed SIRS. 1) Temperature >100.40 F (38.0 C) or < 96.80 F (36.0 C). 2) Pulse rate > 90/min 3) Respiratory rate >20/min. 3) WBC count >12000/ml or < 4000/ml. **RESULTS:** Out of 120 who patients underwent PCNL 29(24.1%) developed features of SIRS. On univariate analysis gender, diabetes mellitus, bladder urine culture and serum creatinine were found to be statistically insignificant. Blood transfusion (p=0.009), no of access tracts (p=0.001), pelvic urine culture (p=0.04), stone culture (p=0.003), stone size (p=0.001), age (p=0.019) and operative time (p=0.004) were found to be statistically significant. On multivariate regression analysis stone size, no of access tracts, operative time and stone culture were found to be statistically significant with regard to occurrence of SIRS. **CONCLUSION:** Patients with above identified risk factors must be aggressively treated in order to prevent the occurrence of sepsis postoperatively.

POD 19 – 04

Guy's stone score system - clinical relevance in PCNL

Shivagouda Patil, R. B. Nerli, Siddaya Hiremath, Abhijith SM, Prasad Magdum

KLES Dr. Prabhakar Kore Hospital & MRC Belgaum

Objective: To evaluate the Guy's stone score in clinical practice to predict the probable complications in PCNL and utility of scoring system in counseling the patient preoperatively. **Materials and Methods:** Study period is from Jan 2012 to Dec 2014. Institutional ethical clearance committee approval was taken for the study. Total 200 patients with 220 renal units were prospectively evaluated. Pre operative CT scan was done in all patients and Guy's stone scoring was done in all patients and classified according to the Guy's stone scoring system. All patients underwent prone PCNL. All PCNL's were performed by single surgeon. Both intra-operative and post-operative complications were evaluated. Outcome of procedure was confirmed with USG and plain X Ray KUB. **Results:** Total 220 PCNL from 200 patients were included in the study. Pre-operative scoring was done in all patients, out of whom 66 (30%) were GS-1, 59 (27%) were GS-2, 51 (23%) were GS-3 and 44 (20%) were GS-4. Operative timings in each group differed from 60±20.3 min in GS-1, 80±10 in GS-2, 95±15 min and 120±23.7 min in GS-4 were noted. Tubeless rates were 48% in GS-1 to 0% in GS-4. Complications were 5% in GS-1, 9% in GS-2, 23% in GS-3 and 35% in GS-4. **Conclusion:** GS scoring system can accurately predict success and complication rates. It can be used in pre-operative counseling of patients and also helpful in Medico-legal cases.

POD 19 – 05

ESWL for Solitary renal calculi less than 15mm

Ranjeet A Patil

KLES Dr Prabhakar Kore Hospital, Belgaum

Introduction & Objectives: ESWL is one of the option in treatment of Renal Calculi lesser than 1.5 cm in size. Recently launched Government schemes in India have approved various centres for treatment of Renal Calculi which pay more for PCNL than ESWL. Not only patients prefer one time clearance but Post-graduate residents are inclined towards PCNL. The fee structure of Hospitals is such that an Urologist doing PCNL gets paid more. All these factors lead to patient being subjected to PCNL rather than ESWL. This paper reiterates ESWL as the prime modality for calculi less than 1.5 cm with quantitative data supporting it. **Materials and Methods:** 134 Adult Patients undergoing ESWL procedure in our Hospital, from July 2013 to June 2014 with single renal calculus of less than 1.5 cm in size were included. **Results:** The mean age of subjects was 38±5.8yrs. There were 77(57.46%) men and 57(42.53%) women subjects. 41(30.59%) of the

patients underwent DJ stenting. Average size of calculus was 1.43±0.44cm. The calculus occupied upper-calyx in 34.32%, middle-calyx in 27.61%, lower-calyx in 14.17% and Renal pelvis in 23.88% of patients. The average number of shocks were 218±478 in each setting. The average energy expended in each setting to fragment a calculus was 62.49J. Upper, middle calyx & Pelvis had clearance rate of 97.39% and lower calyx 78.94%. No or poor fragmentation seen in 3(2.23%) cases. **Conclusions:** ESWL still remains the primary option in treatment of Solitary renal calculi less than 15mm

POD 19 – 06

To determine the role of stone density and skin-to-stone distance (SSD) by non-contrast computed tomography of abdomen in predicting the success of extracorporeal shock wave lithotripsy (ESWL) for renal stones

Younis Bhat, Rama Raju K, Prasad Raju K, Chatterjee S, Siddalingaswamy, Maliks

Care Hospitals Banjara Hills Hyderabad

Objectives: To determine the role of stone density and skin-to-stone distance (SSD) by non-contrast computed tomography of abdomen in predicting the success of extracorporeal shock wave lithotripsy (ESWL) for renal stones **Methods:** We evaluated 104 patients who received ESWL for renal and upper ureteric calculi measuring 5–20mm, over 2 year period. Mean stone density in Hounsfield units (HU) and mean SSD in millimetres (mm) was determined on pretreatment CT abdomen. ESWL was successful if post-treatment residual stone fragments were ≤3mm. **Results:** ESWL success was observed in 56% of the patients. Mean stone densities were 650±132 and 900±88 HU in ESWL successful and failure groups, respectively; this was statistically significant (p < 0.001, student's t-test). Mean SSD were 8.8±2.0 and 12.6±2.8 cm in ESWL successful and failure groups, respectively, this was also statistically significant. **Conclusions:** This study shows that stone density and skin to stone density can help in predicting the outcome of ESWL. We propose that stone densities <600 HU are highly likely to result in successful ESWL. Conversely, stone densities ≥8500 HU are less likely to do so. This should be accounted for when considering ESWL.

Podium Session 20: UROLITHIASIS 2

POD 20 – 01

Pre operative imaging prior to ureterorenoscopy(URS) and percutaneous nephrolithotomy (PCNL): Can IVU retire

Pathrose G, Berry JC, Panda A, Singh SK, Kekre NS, Devasia A

Christian Medical College Hospital Vellore

Introduction: An intravenous urogram (IVU) or contrast enhanced CT (CECT) is often performed prior to intervention for urolithiasis. With the availability of good resolution ultrasonography and retrograde ureteropyelography (RGP), we sought to assess whether the treatment plan for Percutaneous nephrolithotomy (PCNL) or Ureterorenoscopy (URS) will be altered without IVU or CECT **Material and methods:** In this IRB approved, prospective observational study all eligible patients scheduled for URS or PCNL underwent RUS in addition to IVU prior to surgery. Post-operatively, two consultant urologists blinded to the treatment reviewed the RUS, X-ray KUB and RGP. After making the treatment plan, IVU and treatment offered were studied. Any change in plan attributable to IVU was documented. **Results:** Of the 89 subjects enrolled, 27 underwent URS and 62 underwent PCNL. 65(73%) of their RUS were expected to have normal function as determined by two urologists blinded to IVU. There was 100% concurrence. Treatment plan after RGP without viewing IVU was essentially the same. In 24(27%), there were morphological changes in RUS. Most of them had prior interventions or prolonged symptoms. Even in this group, the treatment remained the same in all except one (1.1%, radiolucent stone). However, documentation of function was probably beneficial in multiple stones 32(36%), prior interventions 18(20%) or parenchymal thinning 17(32%). **Conclusion:** URS and PCNL may be safe in radiopaque stones with normal renal architecture on RUS. Functional study may be beneficial in multiple stones, prior interventions or altered renal architecture.

POD 20 – 02**Utility of guy's stone score to assess the success rates of percutaneous nephrolithotomy and evaluation of complications using modified clavien grading system: a single center experience****Parikh A, Jaiswal A, Shivanna N, Tuli A, Sridhar FK, Mammen KJ**

Christian Medical College and Hospital, Ludhiana

INTRODUCTION AND OBJECTIVES We report an audit of our stone clearance rates and perioperative complications of percutaneous nephrolithotomy (PCNL). **METHODS** Retrospective analysis of data including stone complexity and complications of all patients (n=58) operated between September 2013 and August 2014 was done. **RESULTS** Out of 62 renal units treated, there were 26, 21, 11 and 4 patients in Guy's stone scores (GSS) I, II, III and IV groups respectively. GSS I (n=26) included 8 pelvic, 6 middle and 12 inferior pole calculi, GSS II (n=21) 13 multiple, 5 upper and 3 pelvic calculus with pelviureteric junction obstruction (PUJO), GSS III (n=11) 8 partial staghorn and 3 multiple calculi with PUJO. GSS IV (n=4) had complete staghorn calculus. Stone free rate was 90.32% (56/62) of cases. Of the rest 6 patients, 2 underwent RIRS and 4 underwent URS for residual fragments. 66.6% (4/6) of the residual stones belonged to the GSS III and IV groups. 21 (33.87%) had grade 1, 24 (38.70%) grade 2 and 1 had grade 3 complication according to modified clavien system. Grade 1 and grade 2 complications are considered minor complications. Complication rates were directly proportional to the Guy's scoring system. **CONCLUSION:** Complications in clavien grade 1 and 2 are minor and grade 3, 4 and 5 are major. In our study, most complications are minor seen in 97.82% and only 2.18% had major complications. As the stone complexity increases (GSS III and IV group) residual stone rate and the complication rates increased.

POD 20 – 03**S.T.O.N.E Nephrolithometry - how well does it fare ?****Tripathy N., Kulkarni R, Rao A N, Choubey S K, Adhyam M, Sreedhar D**

St. John's Medical College, Bangalore

INTRODUCTION Since its advent in the 1970s, PCNL has become the first-line treatment option for complex, large, and staghorn calculi. Although guidelines exist for the management of renal stones, the urologic community remains without a widely accepted standardized system to classify stones within the upper urinary tract. Zamshid et al proposed the S.T.O.N.E Nephrolithometry system based on five variables obtainable from the Pre op non contrast CT KUB. **OBJECTIVE** To apply the scoring system on the patients undergoing PCNL in our institute to assess its reliability and usefulness **METHODS** We have applied the above scoring system on the patients undergoing PCNL in our institute from October 2013 to till date and the intra operative findings, the post-operative course, complications and stone clearance are observed. **Statistical analysis** done to check for the predictive value of the Scoring system. **RESULTS** The score is matched to the intra-operative and post-operative outcomes and the results are tabulated. **CONCLUSION** STONE Nephrolithometry is a valuable tool to predict the difficulty in performing PCNL, post-operative complications and the possibility of residual calculi.

POD 20 – 04**Is adjuvant therapy helpful for successful outcome in patients undergoing ESWL?****Sharma Rakesh, Mitra K Subrata, Dey K Ranjan, Basu Supriya, Das K Ranjit**

R G Kar Medical College, Kolkata

Introduction and objectives ESWL is the treatment of choice for majority of renal and upper ureteric calculi. But the outcome shows a wide variation from patient to patient and is probably influenced by multiple factors. The objective was to analyze the influence of factors like stone size, location (lower calyx or non lower calyx), density (CT Hounsfield units) and adjuvant therapy (with or without Tamsulosin or DJ Stent) on stone fragmentation, stone clearance, post procedure analgesic requirement and

final success of ESWL procedure. **Materials & Methods** 120 consecutive patients who fulfilled the inclusion & exclusion criteria for ESWL were enrolled in the study. After selection patients were randomised into four study groups. 1. First group received ESWL without any adjuvant therapy. 2. In second group, DJ Stenting was done prior to the ESWL procedure. 3. The third group, received ESWL with Tamsulosin {max 30 days}. 4. In fourth group DJ Stenting was done atleast one week before ESWL and the stent was removed just prior to the procedure. **Results** Ninety two patients out of 120 (76.7%) showed a successful outcome i.e. either complete clearance or residual fragments less than 4mm in size. While lower stone density, non lower calyceal location and the fourth group (DJ Stent removal just prior to procedure) showed a significant association with treatment success (p<.05), stone size did not (p>.05). Stone fragmentation showed a highly significant correlation with stone density (p<.05) but not with stone size, location and a negative correlation with DJ Stent insitu (second group). Post procedure analgesia requirement was least in Tamsulosin group (3rd group) **Conclusion** ESWL success is strongly influenced by stone density, lower calyceal location and DJ stent. Stone size has no affect provided that ESWL is confined to stones less than 2.0 cm size. Tamsulosin can decrease analgesic requirements in these patients.

POD 20 – 05**Evaluation of complications of percutaneous nephrolithotomy (PCNL) using modified clavien grading system and comparison between supracostal and infracostal approach: a single-centre experience****Sharma Kuldeep, Sankhwar SN, Goel A, Gupta S, Singh BP, Sharma P, Jhanwar A**

King George's Medical University, Lucknow

Introduction and Objectives - To prospectively document the perioperative complications of percutaneous nephrolithotomy (PCNL) using the modified clavien grading system and comparison between supracostal and infracostal approach. **Methods**- All PCNL procedures done at a King George's Medical University between Jan 2012 to June 2013 were included and data was recorded prospectively. Patients who underwent PCNL by single puncture either Supracostal or infracostal approach were analyzed in detail regarding preoperative and perioperative parameters. Peri-operative complications were recorded using the modified Clavien grading system. **Results**- Total number of punctures were 256 in 256 renal units, among them Supracostal puncture were made in 82 patients and Infracostal punctures were made in 174 patients. These groups were comparable with regard to mean age, sex distribution, basal metabolic index. Complications were seen in 28% of total patients. Maximum complications were of Clavien grade II in both groups, which were similar in both group. Clavien grade I, IIIA and IIIB complications were more in subcostal puncture group. Higher pulmonary complication rate were seen in supracostal puncture. **Conclusion**- Modified Clavien grading system has been shown to be a reliable tool for more objective outcome comparisons after renal stone treatment. Supracostal approach is safe and effective approach, and should be considered in cases it needed.

POD 20 – 06**Extracorporeal shockwave lithotripsy for management of distal ureteric calculi****Katti AR, Javali TD, Prakash Babu SML, Nagaraj HK**

M S Ramaiah Medical College, Bangalore

Introduction: To assess the effectiveness, morbidity and clinical outcomes of ESWL for lower ureteric calculi. **Materials and Methods:** Prospective study between Jan 2011 and June 2014 of 175 patients with distal ureteric calculi (> 5 mm & <20 mm) who were treated with ESWL. Patient and stone characteristics, clinical outcomes, complications were analysed. **Results:** Of the 175 patients in the study, mean age was 39 years with a male preponderance of 70%. 24% of patients had previous history of urolithiasis. Pain was the most common symptom followed by fever, vomiting and dysuria. Stone size and location was assessed by non contrast CT of KUB region. Mean stone size was 11.6mm. 48% patients had complete stone clearance in a single session, 44.6% in 2 sessions and remaining required 3 sessions or additional procedures. Mild haematuria and pain were the

most common complaints after the procedure. There was a statistically significant correlation with stone size and the number of sittings, number of shocks, intensity and duration of the shocks and stone free rates. Patients were considered as stone free if there were no radio-opaque densities noted on post procedure non contrast CT KUB. None of our patients required overnight hospital stay. 6 patients required an additional procedure (ureteroscopy and basketing). 78% of our patients returned to work the next day. Conclusion: ESWL is a simple, effective and non-invasive procedure for distal ureteric calculi. It has less morbidity and high stone free rates with quick return to work.

Podium Session 21: UROLITHIASIS 3

POD 21 – 01

Percutaneous Nephrolithotomy (PCNL) for inferior calyceal calculi : superior vs inferior calyceal access ?

Yogesh Garg, Singh V, Sankhwar SN, Sinha RJ ,Kumar M, Gupta S, Verma VP, Sharma P

KGMU Lucknow

Introduction and Objective To compare the outcomes of PCNL through superior calyceal access versus inferior calyceal access for inferior calyceal calculus with or without pelvic calculi. **Materials and methods** We prospectively studied the records of patients with inferior calyceal calculus with or without pelvic calculi who underwent PCNL in our department from January 2006 to December 2013. Patients were divided into two groups : Group 1- Patients who had underwent PCNL via fluoroscopy guided superior calyceal puncture. Group 2- Patients who had underwent PCNL via fluoroscopy assisted inferior calyceal puncture. **Demographic and pre operative variables** , intra operative findings and post operative findings were noted. **Results** A total of 103 patients were included in the study. 44 patients were included in group 1 (superior calyceal access) and 59 patients were included in group 2 (inferior calyceal access). **Demographic and pre operative variables** in the 2 groups were comparable. Complete stone clearance was achieved in 42 of 44 patients in the group 1 and 55 of 59 patients of group 2. 2 patients with residual calculi in group 1 and 3 in group 2 underwent ESWL while 1 patient of group 2 underwent relook PCNL. **Incidence of complications** between the 2 groups were not significantly different ($p>0.05$). **Conclusions** Our study emphasizes that even in solitary inferior calyceal calculi or inferior calyceal calculi with pelvic calculi, superior calyceal access is advantageous in terms of lesser operative time, fewer number of punctures, greater stone clearance rates and lesser number of auxiliary procedures. This comes with acceptably increased risk of chest complications especially when puncture is supra costal.

POD 21 – 02

Prospective evaluation of PCNL learning curve of urology trainee according to stone complexity at our centre

Amit Garg, Vinay Tomar, S.S. Yadav, Shivam Priyadarshi, Nachiket Vyas, Neeraj Agarwal

SMS Medical College, Jaipur

Introduction and Objective- to prospectively study the PCNL learning curve of urology trainee according to stone complexity using validated Guy's Stone Score (GSS) **Material and Method-** A total number of 247 patients were operated for PCNL during the period of July 2013 to June 2014 by urology trainee. Patients were classified into 4 groups according to according to Guy's Stone Score (GSS). **Intraoperative time and fluoroscopic time** was recorded for all patients. **Complications** were recorded using the modified Clavien grading system. **Clearance rate** were also recorded for each group. **Study period** was divided into four trimesters. All these data were also compared with senior urologists. **Results-** out of 247 patients 128 patients were categorized to stone complexity grade 1(GSS1), 68 patients with grade 2 (GSS2), 43 patients with grade 3 (GSS3) while 8 patients were with grade 4 (GSS4) stone complexity. **Mean intraoperative time** for group 1,2,3 and 4 were 46, 61, 84 and 116 minutes for first trimester and 32,48, 79 and 110 minutes for last trimester. **Fluoroscopic time** for group 1,2,3 and 4 were 4.1, 5.9, 8.3 and 11.3 minutes for first trimester and 2.5, 3.9, 7.5 and 10.6 minutes for last trimester. **Whereas clearance rate** for group 1,2,3 and 4 were 98%, 70%, 51% and 0% for first trimester and 100%, 82%, 58%

and 0% for last trimester. **Conclusion-** Steepness of PCNL learning curve increases with the stone complexity grade.

POD 21 – 03

Effect of silodosin on stone clearance after extracorporeal shock wave lithotripsy(ESWL) for renal stones

Kumar Rajesh Ranjan, Mukesh Kumar Soni, Gururaj P, Saurabh Joshi, Ravishankar THS, Muddegoudar S, Imdad Ali N

Vijayanagar Institute of Medical Sciences, Bellary

INTRODUCTION AND OBJECTIVE: Renal stone disease is the third most common disease of the urinary tract and a world wide problem. ESWL has revolutionized the treatment of urinary stone with concept of stone fragmentation. Although ESWL is effective treatment, it can cause complications like stone colic, delayed stone fragments passage or obstructed ureter due to steinstrasse. Recently, medical expulsive therapy (MET) has been investigated as a supplement in an effort to improve spontaneous passage of stone. The present study is a prospective study, performed to know the efficacy of silodosin on spontaneous expulsion of stone fragments following ESWL done for renal stones. **MATERIAL & METHODS:** This is a prospective study. Total 66 patients with renal calculus of size, 0.6 to 1.5 cm were considered for ESWL, divided into two groups of 33 patients. Group A patients received diclofenac and antispasmodic(drotaverin HCL) as required once daily & Group B patients received silodosin 8mg daily in addition to analgesic & antispasmodic following ESWL. All patients were instructed for adequate hydration. **RESULTS:** Out of 66 patients, 81.8% of the patients receiving silodosin and 51.5% of control patients had complete expulsion of fragments at the end of one month following ESWL. This difference was significant. **CONCLUSION:** Addition of silodosin as adjuvant medical therapy after ESWL is found to be more effective than ESWL alone in patients with renal stone.

POD 21 – 04

Prospective analysis of percutaneous nephrolithotomy using guy's stone score

Syama Sundara T, Tyagi A, Anil Kumar. N, P Vasanth Rao, Bhavani Shankar G

Sri Venkateshwara Institute of Medical Sciences, Tirupati

Introduction: Percutaneous nephrolithotomy(PCNL) is a established minimally invasive treatment modality for treatment of renal calculi. **Guys stone score(GSS)** is a reliable, predictable method for assessing stone free rate after PCNL. We analysed stone free rates after PCNL using GSS. **Materials and Methods:** We performed a prospective study between march 2013 to may 2014 on all the patients underwent PCNL were evaluated. All the patients preoperatively investigated and classified according to GSS. **Postoperatively complications** analysed using clavien grading system. **Stone free status** checked at the end of 3 months. **Data** were analysed and compared. **Results:** 95 patients (100 renal units) were included in the study, 32% GSS I, 36% GSS II, 22% GSS III, 10% GSS IV. 60 patients were males and 35 females with mean age 35.2 (16-72yrs). **Mean operating time** (GSS I 53.2, GSS II 110.6, GSS III 135, GSS IV 164.6), **blood transfusion rates** (GSS I 1%, GSS II 3%, GSS III 10%, GSS IV 18%), **complication rates** (GSS I 5.2%, GSS II 20.1%, GSS III 32.3%, GSS IV 42.4%) and **stone free rates** (GSS I 100%, GSS II 97.5%, GSS III 92%, GSS IV 76%). **Ancillary procedures** needed in 8 cases. **Failure rate** 3%. **Mean hospital stay** was GSS I 5.3, GSS II 7.2, GSS III 8.4, GSS IV 9.2. **Complication rate** according to clavien grade 1,2,3a,3b,4a,4b,5 were 30.4%, 43.2%, 13%, 5.4%, 4.2%, 3%, 0.8%. **Conclusions:** GSS predicted the stone-free rates. **Chances of significant residual stones** requiring additional procedures were high as the GSS increased. GSS predicted the morbidity well.

POD 21 – 05

Evaluation of factors responsible for febrile urinary tract infection in patients with ureteric colic

Sandeep Agrawal, Viswaroop S. B., Arul M., Gopalakrishnan G., Kandasami S. V.

Vedanayagam Hospital and Post graduate institute, coimbatore

Introduction and objective: Most patients with ureteric stone present as ureteric colic. It is uncommon for these patients to have febrile urinary

tract infection (UTI). The aim of this study is to identify the predisposing factors for febrile UTI in patients with ureteric colic. Material and methods: This prospective study was conducted between June 2013 to May 2014. Patients with ureteric colic and febrile UTI were enrolled as cases (n=80) and those who had ureteric colic without febrile UTI were enrolled as controls (n=80). Febrile UTI was defined as fever (temperature > 100° f) in patients with pyuria and irritative lower urinary tract symptoms with or without positive urine culture. Parameters studied were age, sex, body mass index (BMI), duration of symptoms, associated co morbidities, size of calculus, unilateral or bilateral involvement, and pre-existing renal stone disease. Result: Median age of patients in case and control groups were 50.5 yrs and 48.5yrs respectively. Diabetes mellitus and BMI >30 were found to be statistically significant factors. Age, sex, duration of symptoms, size of calculus, unilateral or bilateral involvement and preexisting renal stone disease did not have any statistically significant association. Conclusion: Diabetes mellitus and obesity increase the risk of developing febrile UTI in patients with ureteric colic. These patients should undergo early intervention to prevent complications.

POD 21 – 06

Does IVU make difference when treatment plan is made based on ultrasonogram and x ray KUB

Amit K. Bhoir, Shanmughadas K V, Madhavan N, Rajeevan A T, Dineshan K M, Venugopal A V, Felix Cardoza

Government Medical College, Calicut

INTRODUCTION AND OBJECTIVES: Many consider USG and Xray KUB as first evaluating modality for renal colic and IVU may not be necessary for all. Purpose of this study was to determine whether IVU as routine imaging can significantly change clinical decision made on basis of USG and KUB or not. STUDY METHODS: From July 2013 to Dec 2013, 90 patients were enrolled for the study based on presence of hydronephrosis of kidney on USG, presence of radioopaque shadow and previous history of recurrent renal colic. Patients were divided into two equal groups. Both groups were assessed by urologist to decide about treatment plans. Then all patients underwent IVU and were evaluated for second time by another urologist considering IVU. RESULTS: On basis of USG and KUB assessment, all 90 patients were identified candidates for ureteroscopic stone extraction (URE). According to secondary IVU based assessment, about 8.87% (8/90) treatment plans were changed by IVU which was not statistically significant. CONCLUSION: IVU need not be performed routinely before all URE once the decision to proceed with URE has been taken based on USG and Xray KUB.

Podium Session 22: ENDOUROLOGY 3

POD 22 – 01

Study of predictive factors affecting the duration of urinary leakage after percutaneous nephrolithotomy

Haris Ansari, Tomar V., Yadav S.S., Priyadarshi S., Vyas N., Agrawal N.

SMS Medical College Jaipur

INTRODUCTION AND OBJECTIVE: Duration of urinary leakage (DUL) after Percutaneous Nephrolithotomy (PNCL) is a common event and bothersome to the patient. It increases the morbidity and duration of hospital stay. In this study we evaluate the factors that may influence the DUL following PNCL. METHODS: A prospective study conducted over the period from April 2013-August 2014. All Non CKD renal stone patients who required PNCL were included. Patients were divided into four groups according to Guy's stone score. 836 consecutive patients underwent PNCL during the study period and after exclusion 576 patients included in study. The factors included are history of ipsilateral open renal surgery, degree of hydronephrosis, anatomy of pelvis, interested calyx of puncture, pelvicalyceal angle, pelvicalyceal perforation, tract length determined by measuring the access line between the calyx that underwent PNL and skin at a 300angle with 18G initial puncture needle; procedure time, surgeon's experience, and residual stones. RESULTS: There was no statistically significant correlation were found between age, sex, BMI, stone burden, pelvicalyceal system anatomy, and tract length. Degree of hydronephrosis,

residual stones, decrease in thickness of parenchymal tissue, intra renal pelvis, acute pelvicalyceal angle, pelvicalyceal system perforation and PCNL performed by training residents, has significantly correlated with DUL. CONCLUSIONS: Several factors appear to affect post PNCL urine leakage. Although most of urinary leakage was managed conservatively, it increases the morbidity and hospitalization of patients.

POD 22 – 02

Comparison between transurethral cystolithotripsy and percutaneous cystolithotripsy. Which is more safe?

Bikash Bawri, Das D, Deka A, Deka P M

Dispur Hospitals, Guwahati

INTRODUCTION: Bladder lithiasis remains a clinical problem in both developing and developed countries. The treatment options include transurethral cystolithotripsy (TUCL), open cystolithotomy, and percutaneous cystolithotripsy (PCCL). For larger calculi, transurethral treatment can be time consuming and has the potential to cause urethral injury. PCCL represents better treatment option and is effective and minimally invasive. PATIENTS AND METHODS: Twenty patients with aggregate stone size >2.5 cm were enrolled in the study between August 2012 and July 2014. TUCL (n=10) or PCCL (n=10) procedures were performed during the study and 10 patients, 5 in each group underwent simultaneous TURP. In the TUCL group, the stones were removed after fragmentation through a 23F sheath. In the PCCL group, the stones were removed through a suprapubic 26F Amplatz sheath after fragmentation. Duration of the procedure, hospital stay and complications were compared. RESULTS: All patients were cleared of the stone burden with a single procedure, and there were no major complications except one urethral stricture in TUCL group. Duration of procedure was less in PCCL group as larger fragments could be removed. PCCL was easier to perform in patients who underwent concomitant TURP. Hospital stay was comparable in both groups. The mean duration of suprapubic catheterization in PCCL group was 1.6 (range 1-3) days and perurethral catheterisation in TUCL group was 1.4 (range 1-3) days. With concomitant TURP the duration of perurethral catheterisation was 3.5 (range 2-5) days. CONCLUSION: PCCL is an effective and safe technique for treating large bladder calculi. It is minimally invasive, avoids urethral injury and is easier to perform in combination with TURP.

POD 22 – 03

Impacted ureteric calculus – is combination of laser and pneumatic lithotripsy better than single modality?

Bikash Bawri, Das D, Deka A, Deka P M

Dispur Hospitals, Guwahati

Introduction: Impacted ureteral calculi are more difficult to fragment with SWL that is better managed ureteroscopically. Our study aims to evaluate the efficacy and safety of combination of Holmium laser lithotripsy and pneumatic lithotripsy for the treatment of impacted ureteral stones. Patients and Methods: In last two years 150 patients with impacted ureteral stones (size 10- 20 mm) were treated. Patients were divided in three groups (50 each), one treated with laser, second treated with pneumatic and the third treated with combination of both. The patients were managed via the retrograde endoscopic approach using small caliber (6/7.5 F semirigid) ureteroscopes. All patients were stented. Duration of the procedure, stone migration, intraoperative and postoperative complications and residual stones were compared. Results: Duration of the procedure was least in group 3 and most in group 1. In group 2, 8(16%) patients had stone migration to kidney while only 2 patients each (4%) had stone migration in other 2 groups. Endoscopic observation revealed inflammatory polyps at the site of impaction in 40 patients and a stricture adjacent to the stone in 9 cases. 7(14%) cases of ureteral mucosal injury occurred in groups 1 and 2 but only 3(6%) cases in group 3, all were treated conservatively. Mild hematuria occurred in 6(12%) cases in group 2. No residual stones or hydronephrosis or stricture was observed at 3 months followup. Conclusion: Holmium laser lithotripsy may be considered an effective first line therapy for chronically impacted ureteral stones but in combination with pneumatic lithotripsy the duration of the procedure decreases with less chances of complications.

POD 22 – 04**Comparison of efficacy of tamsulosin, tolterodine, and combination of both in treatment of double-j stent-related urinary symptoms****Krishna Swamy S A, Singh M, Singh V, Sankhwar SN, Singh B P, Kumar M, Garg Y**

King Georges Medical College, College

Introduction: Though ureteral stents are widely used in urology with a purpose of providing continuous drainage of the kidney, need for their routine use following endoscopic stone removal has been questioned due to discomfort associated with it. Despite multiple modifications in the stent design and medical interventions stenting is associated with significant patient discomfort. However, majority of the urologists place stents following endoscopic stone surgeries. **Aim:** To study the effect of Tamsulosin 0.4 mg, Tolterodine 4 mg and the combination of both in stent related symptoms. **Material and methods:** A prospective randomized control study, conducted between May and July 2014. Patients undergoing unilateral ureteral double-j stenting after endoscopic stone surgery were divided into four arms receiving placebo, Tamsulosin 0.4mg, Tolterodine 4mg or combination of both. Ureteral stent symptom score (USSQ) was used to assess the stent related discomfort. USSQ was administered before stent placement and at the time of stent removal. **Results:** 136 patients, 76 men and 60 women with Mean age: 34.3 years, and stenting was done in 108 for PCNL and URS in 28 patients. USSQ score was significantly better in both Tamsulosin 0.4 mg and Tolterodine 4 mg group in 5 of the six domains of the USSQ compared to Placebo group. The combination of both was better than placebo in 5 domains. It was significantly better than Tamsulosin and Tolterodine group in 2 and 3 domains respectively. **Conclusion:** Combination of both drugs is better than placebo or either of the drugs individually in relieving stent related symptoms.

POD 22 – 05**The ureteroscope-assisted "Mini-Perc" technique for the removal of pyelocaliceal stones with a 16-Fr Modified Amplatz sheath: 1 year results in 17 patients****Saurabh Joshi, Gururaj P, Kumar Rajesh Ranjan, M. Soni, Ravishankar THS, Shivshankarappa M, Imadad Ali N**

Vijayanagar Institute of Medical Science, Bellary

OBJECTIVES: This study was undertaken to evaluate the clinical feasibility, safety and cost effectiveness of the ureteroscope-assisted "Mini-Perc" technique with a 16-Fr Modified Amplatz sheath for removal of pyelocaliceal stone. **PATIENTS AND METHODS:** A ureteroscope-assisted "mini-perc" technique using 16-Fr Modified Amplatz sheath & 6/7.5fr ureteroscope was used. 21 ureteroscope-assisted "mini-percs" have been performed in patients aged 15-55 years with stone burdens of $< \text{or} = 2 \text{ cm}^2$. Pneumatic lithotripsy was performed using the EMS Swiss lithoclast. On average, patients had 1.4 stones with a cross-sectional area of 1.5 cm². There was no procedure-related complication or transfusion. **RESULTS:** The ureteroscope-assisted "mini-perc" technique of percutaneous nephrolithotomy, which uses the 16-Fr Modified Amplatz sheath & 6/7.5fr ureteroscope, is a safe and effective modality for treating renal calculi. As compared with standard PCNL, the ureteroscope-assisted "mini-perc" technique has similar early success rates in selected patients and may offer advantages with respect to hemorrhage, postoperative pain, and shortened hospital stays. The high cost effectiveness associated with ureteroscope-assisted "mini-perc" technique make it a viable alternative to conventional "mini-perc" technique.

POD 22 – 06**Percutaneous Nephroscopic Pancreatic Necrosectomy: A urologist's gift to pancreatic surgeon****Jain Vikas, Pandey Praveen Kumar, Aggarwal Nikhil, Arora Asit**

Institute of Liver and Biliary Sciences, New Delhi

Introduction and Objective Pancreatic abscess and necrosis are devastating complications of acute severe pancreatitis. Customarily these complications have been managed by placement of percutaneous drains in

the abscess cavities. Those not responding to drainage alone require open necrosectomy. We recently started doing pancreatic necrosectomy in a manner exactly similar to our PCNL. **Methods** Pancreatic necrosectomy was done using 27 Fr nephroscope. The trans-peritoneal pre-placed drain tract was dilated using Amplatz dilators over the guidewire and Alken rod. The Amplatz sheath placed in the necrotic cavity and under nephroscopic guidance, the cavity was completely cleaned of all the pus and necrotic material. **Results** This procedure was done in seven patients who did not respond to per-cutaneous drain placement. There were six males and 1 female, in the age range of 28-52 years. All patients underwent the procedure as described above. One patient required two sittings for two different cavities. All patients responded well to treatment as their fever disappeared and counts normalised. None of them required ICU care which was a norm after open pancreatic necrosectomy and avoidance of a large laparotomy scar was an obvious benefit. **Conclusions** Percutaneous Nephroscopic Pancreatic Necrosectomy is a minimally-invasive treatment option for the management of pancreatic necrosis, which does not respond to per-cutaneous drainage alone. It is safe and viable and is done like standard PCNL in a pre-placed tract by a trained urologist. It is significantly less morbid than open necrosectomy and can be repeated as many times required to completely clean the cavities and may replace Zipper laparotomies.

Podium Session 23: ENDOUROLOGY 4**POD 23 – 01****Retrograde intrarenal surgery for renal stones: an early experience****Nikhil A Patil, S B Patil, V S Kundargi, Ashok Biradar, Anup Desai**

Shri B M Patil Medical College, Bijapur

INTRODUCTION:- Retrograde intrarenal surgery (RIRS) for the management of renal stones is becoming more and more popular and thanks to technological progress. **AIMS & OBJECTIVE:-** To evaluate the efficacy and safety of RIRS as a primary or secondary procedure and the preliminary predictive factors responsible for stone free rates in patients undergoing RIRS. **Materials and Methods:-** Study period was 2 years. The stone size was measured according to the standard guidelines. In case of multiple stones, the total stone burden was calculated as the sum of each stone size. Stone-free and success were respectively defined as no visible stones and clinically insignificant residual stones less than 3 mm on postoperative imaging. **Results:-** The stone-free rate in RIRS is 81.5% in the sitting. Three patients required Relook RIRS. 30 patients with 32 renal units were treated with RIRS, out of which two patients required bilateral RIRS in different sessions. 22 patients were male and 8 Females. Mean age was 41+ 2.8 years [22-61 years]. Six stones [18.75%] were located in the upper pole, ten stones [31.25%] in the midpole, three [9.37%] in pelvis and 13 [40.62%] in lower pole. The largest stone was 22 mm and smallest was 8 mm. Mean stone size was 14mm + 0.3mm. The Cumulative stone burden was 90+ 21 mm². RIRS was done as secondary procedure in 18 [56.25%] patients and primary procedure in 14 [43.75%] patients. Mean serum creatinine value was 1.4 + 0.3 mg/dl. Thirteen [40.62%] patients were pre stented. Ureteral access sheath was used in 9 patients. Double-J stent was inserted in 26 [83.87%] patients. Mean procedure time was 90 min+ 15 min. In four patients (12.5%), minor complications (Clavien I or II) were observed. The average hospital stay was 2.37 ± 0.72 days. **Conclusion:-** RIRS is advanced and successful technique and a viable alternative for intrarenal stones with minimum morbidity. RIRS is a reliable option as a secondary procedure.

POD 23 – 02**Factors influencing recoverability of renal function after urinary diversion through percutaneous nephrostomy****Sharma Umesh, Tomar Vinay, Yadav S.S, Priyadarshi Shivam, Vyas Nachiket, Aggarwal Neeraj**

SMS Medical College & Hospital, Jaipur

INTRODUCTION AND OBJECTIVE Various factors predict recoverability of kidney function pre-operatively. Placement of PCN & measuring the differential creatinine clearance (CrCl) is still regarded as a simple and

reliable method. **METHODS** Study includes 250 Patients with varying degree of ureteral obstruction. Patients underwent routine investigations, X-KUB, Sonography and CT scan or renal scan whenever indicated. PCN was performed using 18 G needle. Various morphological factors, duration & nature of obstruction, presence of infection, intrapelvic pressure (IPP) was measured. IPP was measured using manometer with mid axillary line as reference point. Urinary pH, electrolytes, PCN output and RFTs were monitored on 1st day and every week till 4 weeks. CrCl & renal scan done after 4 weeks. Post PCN differential function > 10 ml/min was taken as recoverable group and <10ml/min were considered as poor/ no recovery. **RESULTS** 250 patients were enrolled. Mean age 65.5 years (range 24 – 74). The cause of hydronephrosis was calculus (47%), PUJO (25%), cancer (20%), others (8%). CT were <10mm (75%); 10-15mm (15%); > 15mm (10%). IPP were 17 cm (<10mm CT); 16.9 cm (10-15mm CT); 15.7 cm (> 15mm CT). Short duration of obstruction, urine pH <6, high IPP were good prognostic indicators. Renal length and width positively correlate with urine output. Significant correlation between IPP and urine output while no correlation between CT, degree of HDN and urine output was found. Cancer patients had a significantly lower urine output. **CONCLUSION** Our study provides a simple index to evaluate residual renal function before PCN and prevent unnecessary PCN interventions.

POD 23 – 03

Management of ureteral calculus in post transplant patients

PP Singh, Bhaskar Borah, Avijit Mohanty, Amit Malhotra

Batra Hospital and Medical Research Hospital, New Delhi

Introduction-The optimal management of renal and ureteral calculi in transplanted kidneys is not well defined. Lithiasis is an unusual complication of renal transplantation, occurring in 0.2-1.0 percent of transplants. Several different approaches have been advocated for the management of allograft Calculi including endourologic extraction and surgical removal of symptomatic stones. Here we present a case of ureteral calculus who had undergone renal transplant 5 months back, presented with recurrent flank pain for 1 month. Flexible ureteroscopy with laser lithotripsy has been successfully done in this patient. **Result**-Patient was stone free after surgery and doing well. **Conclusion**-Flexible ureteroscopy is safe and effective treatments for patients with simple stone burdens in a transplanted kidney. Although retrograde access to the ureter can be challenging, specialized techniques and modern endoscope technology facilitate this process.

POD 23 – 04

Day Care Percutanepus Nephrolithotomy (PCNL) in Rural Indian setup

Mulawkar PM, Panpaliya GS, Bhat GR

Tirthankar Superspeciality Hospital, Akola

Objective: To assess the safety and feasibility of Day care PCNL in rural Indian setup. **Material and methods:** This study is inspired by earlier published series of ambulatory (UROLOGY 76: 2010: 1288) and outpatient PCNL (Can Urol Assoc J 2010;4(4):E86). Due to the lack of medical facilities in the rural settings in India, we planned to study whether discharge within 24 hours is feasible in our setting. **Selection criterion:** Preoperative: ASA I or II; Age 16+; No cardiac disease, solitary kidney; No h/o fever; SrCreatinine < 2 mg/dl; Adequate family support; Agreeable to discharge; Access to mobile phone **Intraoperative:** Single tract; No intraoperative complications; No perforation; No residual stones; Minimal intraoperative bleeding; No bleeding when removing sheath **Post-operative:** No postoperative complications; No bleeding from nephrostomy; Hemodynamically stable; Ambulated without difficulty; Normal KUB x-ray; Pain under control **Results:** Jan 2011 to Aug 2014, PCNL procedures= 441. 29 patients met the selection criterion Max-stone-diameter -8 to 43 mm; Tract size-16Fr=2, 18Fr=2, 20 Fr = 12, 22 Fr = 3, 24 Fr = 1, 26 fr = 9; Stone Location-Pelvis = 11, UPJ = 5, Pelvic + calyceal = 7, Lower calyx = 4, Upper calyx = 1, Upper ureteric = 1; Entry Calyx -Lower =26, Upper = 2, Mid=1 **Tubes**-Totally tubeless = 4, Nephrostomy =10, Tubeless = 3, Stent + nephrostomy =12 All patients were stone free. Two patients needed readmission one week after discharge for fever. **Conclusion:** In highly selected patients, day care PCNL is safe and feasible.

POD 23 – 05

RIRS in stones larger than 1.5cm

Muneer Khan, Dr Naveed Khan, Dr Syed Sajad, Dr Mufti Mehmood

Kidney Hospital Sonwar Srinagar

RIRS is a viable alternative to mini PCNL and ESWL for small renal stones. it is devoid of the haemorrhagic complications seen in PCNL. it is an effective modality for failed ESWL, mal rotated ectopic kidneys. from march 2008 to march 2014, 112 patients were taken for RIRS. 28 of these had stones larger than 1.5cms but smaller than 2.5cms. patients were stented one week prior to the procedure.access sheath was used in all the patients.RIRS was undertaken using video renolescope with a 200 micron laser fibre.most of the stones were in the inferior and middle calyx and were broken down to very small fragments with holmium yag laser. the debris was flushed at the end of the procedure.digital Xrays were taken immediate post operatively and one month after the procedure.patient was discharged 48 hrs after the procedure. 10 of the 30 patients having calculi greater than 1.5 cms showed residual fragments and another sitting was needed to clear these 10 patients(33%). **CONCLUSION:** stone free rate in RIRS for stones greater than 1.5cms was 66% after the first sitting and 100% after the second sitting. RIRS has less complications, less morbidity and good stone free rate and is a better alternative to PCNL for stones upto 2.5CMS.

POD 23 – 06

An Institutional based study to analyze the safety and efficacy of percutaneous nephrolithotripsy (PCNL) and retrograde intrarenal surgery (RIRS) in the treatment of renal stones < 2cm in diameter

Deepak Garg, Appu Thomas, K V Sanjeevan, Ginil Kumar, Georgie Mathew, Balagopal Nair, Kanan Nair

Amrita Institute of Medical Sciences

INTRODUCTION & OBJECTIVES: The gold standard treatment for removal of renal stones over 3 cm in diameter is percutaneous nephrolithotripsy (PCNL). Retrograde intrarenal surgery (RIRS) becomes more and more fashionable due to its high safety and repeatability, especially in smaller stones. However, many retrospective studies proved its efficacy and safety in larger calculi. It was decided to compare prospectively both procedures in terms of safety and efficacy in renal pelvis stones <2 cm in diameter. **MATERIAL & METHODS:** This was a retrospective single tertiary care center study. The first group comprised of patients who underwent PCNL while in then second group there were patients in whom RIRS with flexible ureteroscope was utilized. The primary endpoints were hematocrit and hemoglobin drop after surgery as equivalents of safety and stone disintegration rate in terms of efficacy. The secondary endpoints comprised of operating room time, visual analogue scale of pain, pain treatment and hospital stay. **RESULTS:** The mean hematocrit drop after procedure was lower in the second group. Similarly, operating room time and hospital stay were significantly shorter after RIRS in comparison with PCNL. In the second group patients had favorable features in terms of pain intensity and treatment after procedure. PCNL showed higher efficacy (95%) in comparison with RIRS (80%).

Podium Session 24: ENDOUROLOGY 5

POD 24 – 01

The surgical results between holmium laser enucleation of the prostate (HoLEP) and bipolar transurethral resection of the prostate (TURP) in patients with obstructive BPH

Sharma Amit, Chaudhary Radhyeshyam, Shaikh Irfan, Andankar Mukund, Pathak Hemant

TNMC and BYL Nair Hospital, Mumbai

Introduction and Objectives The surgical results between holmium laser enucleation of the prostate (HoLEP) and bipolar transurethral resection of the prostate (TURP) in patients with obstructive BPH were compared and

analyzed. Methods Between March 2010 and July 2013, 50 patients with lower urinary tract symptoms secondary to benign prostatic hyperplasia were randomized to HoLEP group or TURP group. All patients were evaluated by preoperative and postoperative International Prostate Symptom Score (IPSS), peak flow rate (Qmax) and post-void residual urine volume (PVR), transrectal ultrasound prostate volume. Follow up evaluations were performed during visits at 1, 3, 6 months. Results Both the groups were comparable in terms of age, pre-operative IPSS, uroflowmetry and prostate volume. During operation, decrease in hemoglobin was less in the HoLEP group than in the TURP group. The operation time was significantly longer in the HoLEP group than in the TURP group. The catheterization period and hospital stay were significantly shorter in the HoLEP group than in the TURP group. At follow up, Qmax, average flow rate and PVR in two groups improved significantly, and these parameters were not significantly different between the groups after 3 months. Conclusions Both bipolar TURP and HoLEP were effective in relieving BOO. The estimated blood loss, a catheterization time and hospitalization were less or shorter in the HoLEP group. HoLEP may be a good alternative to the conventional bipolar TURP in patients with obstructive BPH.

POD 24 – 02

Early complications of TURP done by trainees in a teaching institute

Saumik Chatterjee, TJ Nirmal, Mukha RP, Berry JC, Kumar S, Devasia A, Kekre NS

Christian Medical College, Vellore

AIMS: To identify the short term complications of TURP Materials and Methods: A retrospective study was done in the department of Urology, CMC, Vellore, where 1004 patients undergoing TURP in the last 5 years were looked at. Complications like haematuria, blood transfusion, clot retention, re-surgery, hyponatraemia/ TUR syndrome, failure to void, urinary tract infection/sepsis were recorded and correlated with risk factors. Results: Mean age was 64.8 years (SD-8). Most common indication for surgery was bothersome LUTS and associated co-morbidity was hypertension. Mean weight of resected gland was 19.5 gms (SD-14.8), mean resection time was 54.63 (SD-21.6) min and resection speed was 0.33gms/min (SD-15). Mean volume of irrigant used was 2.48l/gm (SD-0.18) of resected gland. 0.01% required blood transfusion. 5.5% patients developed symptomatic hyponatraemia. 0.8% had TUR syndrome which correlated strongly with large gland size (3.6 times mean gland size). 14.3% had a positive urine culture after TURP of which 50% had a pre-op sterile culture. 5.5% failed to void in the immediate post op period, which had an association with diabetes (odds ratio-6.32, Risk ratio-4.39). 90% of them eventually voided 4.28% developed clot retention and 2.5% required cystoscopic fulguration of bleeders. High grade complications (Clavien-Dindo 4/5) were 1.1% with no deaths. Low grade complications were 25%, mainly accounted for by post-op antibiotic use. Conclusions: TURP (video) is a safe surgery even in hands of trainees. Pre-op co-morbidities, indwelling catheters and large gland size increase risk of post-op complications.

POD 24 – 03

A prospective study to find out the utility of S.T.O.N.E.nephrolithometry, a novel scoring system to predict the outcome of percutaneous nephrolithotomy (PCNL)

Ramesh K.R, Mallikarjuna M, Soni M.K, Ravishankar THS, Shivashankarappa M, N.Imdad ali

Vijayanagar Institute of Medical Sciences, Bellary

INTRODUCTION AND OBJECTIVE. PCNL is the gold standard procedure for renal calculus of stone size 2cm and above. The instruments currently available to predict the percutaneous nephrolithotomy outcomes are cumbersome, not validated, and of limited clinical utility. The objective of this prospective study conducted at VIMS Bellary from Sep 2012 to Aug 2014 is to study the utility of S.T.O.N.E. nephrolithometry scoring system devised by Okhunov.J et al, in predicting the clinical outcome of PCNL. MATERIALS AND METHODS Five reproducible variables available from preoperative noncontract-enhanced computed tomography were measured: stone size (S), tract length (T), obstruction

(O), number of involved calices (N), and essence or stone density (E). RESULTS A total of 97 patients were included. The mean score was 7.5 (range 4-11). The stone-free rate after the first procedure was 85%. There were 15 complications (15.46%). The most frequent complications were postoperative sepsis and bleeding. The S.T.O.N.E. score correlated with the postoperative stone-free status (P = .001). The patients rendered stone free had statistically significant lower scores than the patients with residual stones (6.2 vs 9.5, P = .002). Additionally, the score correlated with the estimated blood loss (P = .005), operative time (P = .001), and length of hospital stay (P = .001). CONCLUSIONS The novel scoring system devised by okhunov and colleagues was found to predict treatment success and the risk of perioperative complications after percutaneous nephrolithotomy. Reproducible, standardized parameters obtained from computed tomography imaging can be used for preoperative patient counseling, surgical planning, and evaluation of surgical outcomes across institutions and within medical studies.

POD 24 – 04

Ventriculo ureteral shunt in chronic hydrocephalus with multiple CSF diversion failures : a novel minimally invasive technique

Sivasankaran N, Georgie Mathew, Ashok Pillai, K.V.Sanjeevan, Appu Thomas

Amrita Institute of Medical Sciences and Research Centre

Introduction : Chronic Hydrocephalus is a condition usually managed with ventriculo-peritoneal shunt. Once the peritoneal cavity fails to adequately provide CSF absorption then the other alternatives include ventriculo-atrial, ventriculo-pleural, ventriculo-gallbladder and ventriculo-ureteral shunts. Historically ventriculo-ureteral shunt has been avoided due to morbidity associated with the described techniques (associated nephrectomy, ureteric reimplantation). The advent of percutaneous nephrostomy allows cannulation of the ureter with minimal complications, thereby making the ventriculo ureteric shunt once again a reasonable option. Materials and methods: We describe three patients who suffered from multiple distal end ventriculo-peritoneal shunt failure (10,8 and 6 times respectively), in whom we opted for ventriculo-ureteric shunt. All three patients showed improvement post-operatively and hydrocephalus remained adequately controlled. Discussion Although the literature is scarce and after initial use in early 1970's it has become nearly obsolete due to requirement of nephrectomy or retroperitoneal exploration to cannulate the ureter. Advancements in percutaneous nephrostomy techniques rather than neurosurgery now make it once again a viable option. We describe our experience and advantages of this technique in three cases

POD 24 – 05

The safety and efficacy of corpus spongiosum block as add on to topical anaesthesia for diagnostic cystoscopy for bladder cancer– Randomized controlled trial comparing three different techniques

Anil Verma, Lalgudi N. Dorairajan, Ramanitharan Manikandan, Kaliyaperumal Muruganandham, Santosh Kumar

JIPMER, Puducherry

OBJECTIVE : To compare whether rigid cystoscopy performed with Intracorporeal corpus spongiosum block (ICSB) is as comfortable and a efficacious technique for performing diagnostic/ check rigid cystoscopy as compared to flexible cystoscopy under topical anaesthesia METHODS : Patients in whom diagnostic / check cystoscopy is indicated for detecting bladder cancer were allocated to group 1 (Rigid cystoscopy under topical anaesthesia), group 2 (Rigid cystoscopy under topical anaesthesia with add on corpus spongiosum block) and group 3 (Flexible cystoscopy under topical anaesthesia) based on computer generated random numbers. ICSB is given by injecting 3 ml of 1% xylocaine at dorsal aspect of glans using 26 guage needle. Pain perception during and after the procedure was assessed by visual analog scale (VAS). The changes in vital parameters during the procedure, surgeons comfort level, operative time and procedure-related complications were recorded. Statistical analysis was done using the Kruskal-Wallis test or one way ANOVA as appropriate for continuous variables. All statistical

analyses were carried out at 5% level of significance and a p-value <0.05 was considered significant. RESULTS The mean and standard deviation VAS scores intraoperatively (3.85 +/- 1.20) and at 1-hour postoperatively (1.85 +/- 0.94) were significantly lower (P <.01) in group 2 patients than the corresponding scores in group 1 (5.86 +/- 1.50 and 3.73 +/- 1.33 respectively). There was no statistically significant difference in intraoperative and postoperative VAS score between Group 2 and 3 (3.85 v/s 3.46 and 1.85 v/s 1.73 respectively). The intraoperative rise in pulse rate and in blood pressure were significantly greater (P<.01) in group 1 patients (11.9 +/- 4.3/min and 14.4 +/- 4.86 mm Hg) than in group 2 (6.9 +/- 2.20/min and 7.35 +/- 2.53mm Hg). There was no statistically significant difference in intraoperative rise in pulse rate and in blood pressure between Group 2 and 3 (6.9 +/- 2.2 v/s 6.4 +/- 2.23 and 7.35 +/- 2.53 v/s 8.4 +/- 3.13 respectively). Mean operative time was higher in group 3 compared to group 1 and 2 (16.13, 11.57 and 14.6 respectively). CONCLUSION - Rigid cystoscopy performed with intracorporeal spongiosum block as add on to topical anaesthesia is as comfortable as flexible cystoscopy under topical anaesthesia with the advantage of less procedure time and is therefore to be recommended for routine use. Also many urologists have no access and limited experience in using a flexible cystoscope and would find this technique useful.

Podium Session 25: UROLITHIASIS 4

POD 25 – 01

C Reactive protein as a predictor for usage of Silodosin in medical expulsive therapy for lower ureteric calculi

Nandakishore, Imdad Ali, Shivashankarappa, Ravishankar, Altaf Khan

Vijayanagara Institute of Medical Sciences, Bellary

Introduction-Serum C-reactive protein is an acute phase reactant. It increases in the setting of infection and inflammation. Presence of inflammation reduces the expulsion rates of lower ureteric calculi. Silodosin, a highly selective alpha 1a receptor antagonist, is used in medical expulsive therapy in patients having lower ureteric calculi less than 10 mm. By using CRP levels, we can predict the successful expulsion rates of lower ureteric calculi following medical expulsive treatment. Methods- 73 patients with lower ureteric calculi less than 10 mm with mild symptoms were subjected to medical expulsion therapy using Silodosin 10 mg once daily. CRP levels were measured. Follow up was done after 2 weeks and 6 weeks with USG or X ray KUB and Repeat CRP. 46 patients with low CRP had successful expulsion of calculi while 27 patients with elevated CRP did not expel the calculus. Conclusion- Silodosin increases the stone expulsion rates, decreases pain, reduces analgesic usage in managing the lower ureteric calculus with MET. It has some side effects like retrograde ejaculation and postural hypotension which can be bothersome for some young patients. CRP level can be used to predict the successful outcome of MET with Silodosin and management can be changed accordingly.

POD 25 – 02

Does real time ultrasound monitoring reduce radiation exposure in ESWL?

Anish K.P, Jyothish A, Vishnu R, Kiran S, Rajanikanth V.S, Chandrasenan N, Sivaramakrishnan P

Government Medical College Hospital, Thiruvananthapuram

Introduction To determine the radiation exposure and the variables determining it, in patients undergoing real time ultrasound guided ESWL with fluoroscopy as an adjunct. Methods The data of patients undergoing ESWL under real time ultrasound guidance with fluoroscopy as an adjunct was collected retrospectively. The radiation exposure to the patient was measured using the Entrance Surface Dose (ESD) calculation. The results were analysed using SPSS v 16. Results A total of 46 patients underwent ESWL in our lithotrite which has both fluoroscopy and ultrasound imaging. The mean radiation exposure was 47.3 mGy with a standard deviation of 6.0 ranging from 1.85 to 298.79. This value was found to be very low when compared to the exposure value to patients who underwent ESWL under fluoroscopy imaging only, as obtained from published literature. The only variable that was found to significantly affect the radiation exposure was the presence of

calculus in ureter versus all other locations. The mean radiation exposure for ureteric calculus was 142 mGy and mean for all other locations was 33 mGy with a p value <0.05. Other factors like size of calculus, caliceal vs pelvic position, density of calculus were not statistically significant probably owing to the small sample size. Conclusion The real time ultrasound guided ESWL certainly reduced the radiation exposure to the patients. Patients with ureteric calculus have significantly more radiation exposure probably owing to the difficulty in localising ureteric stone with ultrasound.

POD 25 – 03

Comparison of antegrade URS, retrograde semirigid URS, laparoscopic retroperitoneal ureterolithotomy, laparoscopic transperitoneal ureterolithotomy, and open ureterolithotomy for management of large upper ureteric impacted calculus

Anoop Kumar Mishra, Tomer V, Yadav SS, Pryadarshi S, Vyas N, Agarwal N

SMS HOSPITAL JAIPUR

INTRODUCTION: Management of large impacted upper ureteral calculi varies and remains controversial. It also depends on expertise and available resources. Aims: The preoperative data and treatment outcomes of various procedures were compared and analyzed (stone free rate, safety, short and long term complication using Clavian system and hospital stay). METHODS: From 2012 to 2014, 135 patients were distributed into five treatment arms according to patient preference and consultant wish. Inclusion criteria were: stone size >1.5cm <2cm, upper ureteric impacted ureteral stone. Group 1- 60 patients, antegrade URS; Group 2- 26 patients, retrograde URS; Group 3- 15 patients, lap retroperitoneal ureterolithotomy; Group 4- 12 patients, Laparoscopic transperitoneal ureterolithotomy; Group 5- 22 patients, open ureterolithotomy. RESULT: Stone free rate was maximum in antegrade URS (>90%), open ureterolithotomy (100%) and lap (<80%). Operative time was longest in laparoscopic retroperitoneal ureterolithotomy. Blood transfusion was maximum in antegrade URS group (<1%) and none in URS group. There was no statistically significant difference in the rate of minor complications between different groups. Overall major complication found in <1%. CONCLUSIONS: All the procedures were more or less effective except retrograde semirigid URS group. We favour antegrade URS with DJ stenting for large impacted upper ureteral calculi in view of higher stone free rate, low complication and short hospital stay.

POD 25 – 04

Comparison of Retrograde ureteroscopic intrarenal surgery (RIRS) and percutaneous nephrolithotomy (PCNL) for large upper ureteric calculi

Vinay Kumar, Bhat A.L., Aeron R., Upadhyay R., Sexena G., Arya M.C

S.P. Medical College, Bikaner

Objective: To evaluate the feasibility of RIRS as a viable alternate to PCNL in treating patients with large upper ureteric calculus cases. Materials and Methods: From May 2013 to June 2014, a total of 24 cases of upper ureteric calculi of 1.5 cm to 3.0 cm (Average size 2.3 cm) stone burden were treated by RIRS (combined flexible and semi rigid ureteroscope and stones fragmented with holmium laser) and PCNL, with 12 patients in each group. X ray KUB for radio opaque stones and ultrasound for all the cases were done after week. If there was no residue the stent was removed under local anesthesia. Data were analysed for intraoperative time, postoperative analgesic requirement, hospital stay, stone clearance. Results: Mean operative time was 86 min for RIRS as compared to 32 min for PCNL. RIRS patients required less injectable diclofenac than PCNL patients (2 vs 3 ampoules). All RIRS patients had hospital stay of one day as compared to 1.5 day for PCNL patients. Complete clearance was considered if there were no fragments on USG screening after a week. The stone free rate in RIRS is 83.3% as compared to PCNL (91.66%) in the first sitting and both had 100% at second sitting. Conclusion: PCNL was the only option to treat large upper ureteric stones before the introduction of RIRS. RIRS is superior in terms of less complication, less morbidity and good stone free rate and has an advantage of one day of hospital stay. RIRS is a viable alternate for upper tract stones.

POD 25 – 05**Complications of percutaneous nephrolithotomy (PCNL) according to modified Clavien grading with respect to guy stone score: a prospective study****Khurshid Ahmed, Chally, R., Azeez, A., Mohanan, K., Chally, P.**

Baby Memorial Hospital, Kozhikode

INTRODUCTION: Owing to lack of consensus to define and grade postoperative complications, comparison of outcome data among different centers is hindered. Modified Clavien system has been proposed for this purpose, and we reviewed our experience with percutaneous nephrolithotomy (PCNL) and grading perioperative complications according to this classification with the Guy Stone score (GSS) being used to determine stone complexity. **MATERIALS AND METHODS:** One hundred sixteen patients fulfilling the study criteria underwent 126 PCNL procedures at our centre between July 2013 and July 2014 and data were recorded prospectively in our registry. Patients with renal impairment were excluded from the study. **RESULTS:** Fifty five complications were encountered in 126 PCNL procedures involving 48 renal units (38%). There were 48, 42, 22 and 4 renal units in GSS I, II, III and IV groups respectively. Complications of Grades 1, 2, 3a, 3b and 4a were seen in 23 (41.8%), 22(40%), 9 (16.4%), 1 (1.8%) and 1 (1.8%) cases respectively. The most common grade 1 and 2 complications were fever (23 cases) and Percutaneous Nephrostomy (PCN) site leak (22 cases). There were 8 Grade 3a and 1 each of grade 3b and 4a complications. All grades of complications were more common in GSS II and III. Higher grade of complications were more common in the higher stone score. **CONCLUSION:** The majority of complications after PCNL were of low grade. GSS correlated well with the Modified Clavien System with higher grades of complication occurring as the stone score increased.

POD 25 – 06**Two urologist bilateral synchronized percutaneous nephrolithotomy: lessens morbidity and saves time****Yadav Subhash, Kumar Jatinder**

Anand Hospital, Meerut

INTRODUCTION AND OBJECTIVE: The bilateral renal stones management is still a challenge. The two urologist bilateral synchronized - percutaneous nephrolithotomy (TUBS-PCNL) appears to be a well tolerated, safe and relatively rapid procedure with a favorable cost-benefit ratio. The purpose of the present study is to report our experience in the TUBS-PCNL. **METHODS:** We prospectively evaluated five consecutive patients, who underwent TUBS-PCNL. It is done by two teams of urologist performing surgery at the same time. A split leg fluoroscopy compatible operating table is used and C-arm machine is placed from the foot end to help both surgeons at the same time. Clinical history, anaesthesia time, fluoroscopy time, surgery time, peri- and post-operative complication, outcomes in terms of stones persistence and length of hospital stay was recorded and analysed. Results were compared with five consecutive sequential PCNL at same centre. **RESULTS:** In total, three men and two women consecutively underwent TUBS- PCNL, with their age ranging from 21 up to 81 years. The anaesthesia time, fluoroscopy time and surgery time was significantly less. We did not notice any difference in any peri- or post-operative surgery related complication. Anaesthesia related complications were relatively less. Stone-free rate was similar after a mean follow-up of five months (range: 3-8 months). **CONCLUSIONS:** TUBS- PCNL is a relatively safe procedure; it may be performed in selected patients without increasing the morbidity and is cost effective also.

Podium Session 26: UROLITHIASIS 5**POD 26 – 01****Supracostal approach for PCNL - safety and efficacy****Jaisukh Kalathia, Santosh Agrawal, Saurabh Chipde, Rajeev Agrawal**

Sri Aurobindo Institute of Medical Science & Post Graduate Institute

OBJECTIVE: Supracostal superior-calyceal access in PCNL is believed to be the most suitable approach for staghorn calculi, inferior calyceal

and upper ureteric calculi. Although it has greater complications and increases morbidity of PCNL, it provides direct access to most of the collecting system and upper ureter. The aim of this study to evaluate single center data regarding the safety and efficacy of this approach. **MATERIALS AND METHODS:** Retrospective data collected of patients who underwent PCNL by a supracostal approach from October 2013 to July 2014. All procedures were performed in a single sitting under general anaesthesia. The punctures were made under C-arm fluoroscopic guidance with bulls eye technique. The data were analyzed for stone clearance rates, hospital stay and postoperative complications. **RESULTS:** Out of total of 110 cases of PCNL, supracostal superior-calyceal approach was done in 44 cases(40%) and infracostal in remaining 66 cases(60%). The indications for supracostal approach included pelvic stones in 16(36%),staghorn stones in 14(32%),calyceal stones in 10(23%) and upper ureteric stones in 4(9%). The overall stone free rate was 82% with this approach or in combined with the middle or lower-calyx. The overall complications rate was 13% and included urinotorax in 1(2%) who required chest tube insertion. Four patients had infection/sepsis(9%) and 1(2%) had postoperative severe bleeding managed conservatively. The mean hospital stay ranged from 2 to 5 days. **CONCLUSION:** The supracostal approach is effective as well as safe and gives high clearance rates with acceptable pulmonary complications and should be attempted in selected cases.

POD 26 – 02**Evaluation of factors responsible for raised serum creatinine in unilateral ureteral obstruction due to calculus****Pankaj Kumar, Viswaroop S B, Arul M, Gopalakrishnan G, Kandasami S V**

Vedanayagam Hospital and Post-graduate Institute, Coimbatore

Introduction and objective : Unilateral ureteral obstruction due to calculus disease is a frequent event seen worldwide. Renal function is usually normal in a vast majority of these patients due to usually a normally functioning contralateral kidney .Thus, most present with normal serum creatinine levels. However, a small subset of these patients present with raised serum creatinine levels. So, we conducted this prospective study to evaluate the factors responsible for raised serum creatinine in the setting of unilateral ureteral obstruction due to calculus disease. **Material and methods :** This study was carried out from June 2013 to May 2014 at our institute .Cases (n=100) i.e those with raised serum creatinine (>1.5mg/dl) and controls(n=200) i.e those with normal serum creatinine were recruited during the study period.They were evaluated for various potential factors like diabetes mellitus, hypertension, pre-existing renal stone disease, fever, use of analgesics and native medications. Both groups were managed by relieving the ureteral obstruction either by placement of ureteral stent or definitive stone treatment . Cases were followed at 3 weeks to monitor change in serum creatinine values . **Results –** Median age of patients were 53 years and 42 years in case and control groups respectively. Age (>50 years), diabetes mellitus, hypertension ,history of pre-existing stone disease, and fever were factors found to be statistically significant .Use of analgesics (NSAIDS) was not statistically significant . **Conclusions –** Patients with unilateral ureteral obstruction due to calculus and above mentioned significant factors should undergo early surgical intervention to prevent early nephron loss.

POD 26 – 03**Prospective study of renal calyceal anatomy by Contrast CT scan in relation to PCNL****Seral Kannan M**

SRM Medical College and Hospital, Kattankulathur

Introduction Calyceal anatomy and its variations in different body position assumes significance in PCNL surgery **Objectives** To prospectively carry out CT scan study of renal calyceal anatomy in supine and prone position with bolsters and its implications in PCNL The primary endpoint was differences in middle and lower calyceal angle to sagittal plane in supine and prone position with bolsters The secondary endpoints were (1) differences in maximum access angle of middle and lower calyces (2) differences in skin to calyceal length of middle and lower calyces **Patients and method** All patients planning PCNL were included in the study between March 2013

to July 2014. Thirty nine patients were studied. Contrast CT scans in the pyelogram phase were obtained in both the supine and prone position with bolsters. Comparison was made for thirty four patients as five patient's data were lost during administrative PACS installation. Both side kidneys were included. Results n=34 Paired t test, Confidence interval 95% for mean difference and p value were obtained. None of the differences were significant except lower calyceal access angle with a mean difference of -9.13333 (P value 0.021) Conclusions There is no difference of middle and lower calyceal angle to saggital plane and no difference in skin to calyceal length of middle and lower calyces in supine and prone position with bolsters. There is no difference in maximum access angle of middle calyx. Lower calyceal access angle showed statistically significant change with less angle in prone position with bolsters.

POD 26 – 04

Percutaneous nephrolithotomy in an ambulatory setting

Zeeshan Hameed BM, Chawla A, Hegde P, Thomas J

Kasturba Medical College, Manipal

Introduction: Percutaneous Nephrolithotomy(PCNL) is the gold standard for endoscopic management of large renal stones. Various modifications have been done to bring down the morbidity of this procedure. Ambulatory PCNL (A-PCNL) aims at short hospital stay which is less than 24 hours with faster recovery. This study aimed at exploring the feasibility and safety of A-PCNL in selective patients. Methods: in this study 13 patients underwent A-PCNL from April 2013 to March 2014. All the procedures were done by a single surgeon. The inclusion criteria: stone size <1.5cm, no associated co-morbidities, Computed Tomography(CT)/Retrograde Pyelogram(RGP) evidence of normal pyelocalyceal anatomy, patient staying within the radius of 15km, well informed patient. All patients underwent totally tubeless PCNL i.e. without nephrostomy, DJ stent and catheter. Skin infiltration was given with 0.25% Bupivacaine. Post operatively analgesia was given on demand. All patients were followed up after 2 weeks. Results: 12 patients underwent prone PCNL and one patient supine PCNL. All patients had single puncture (10 lower calyx, 2 superior calyx, 1 middle calyx), Amplatz<30F, size of the stone (9mm to 1.5cm) with a mean size- 1.3cm, saline used around 300ml. But, 2 patients were discharged after 36hrs and 48hrs due to pain. None of them returned to hospital with hematuria, pain or urinary tract infection. Conclusion: A-PCNL is a safe procedure in well informed selective patients. These are the patients with small burden of stone(1.5cm) and staying close to the hospital. A-PCNL reduces the hospital stay, expenses and results in early return to work.

POD 26 – 05

Is there a role of tamsulosin and deflazacort post eswl for expulsion of renal and upper ureteric calculi fragments

Gupta Nitin

Gauhati Medical College, Guwahati

(a)Introduction and Objective For small and medium sized renal calculi Extracorporeal Shockwave Lithotripsy(ESWL) still remains the preferred treatment though its drawbacks compared to invasive modalities are lesser stone clearance, more time to clearance and colicky episodes. Objective of this study is to evaluate the efficacy of tamsulosin with or without deflazacort for various outcome factors like stone clearance, expulsion time and analgesia requirement after ESWL of upper ureteral and renal calculi. (b)Methods A total of 90 patients with solitary upper ureteral or renal calculi who underwent ESWL were divided into three groups. Group A(30 patients) were given standard therapy(Analgesics), Group B(30 patients) were given standard plus tamsulosin(0.4 mg once daily) and Group C(30 patients) were given standard therapy plus tamsulosin(0.4 mg once daily) and deflazacort(6 mg twice daily). Patients were evaluated at 2 and 4 weeks post ESWL with X ray KUB and USG. (C)Results At the end of 4 weeks 10, 17, and 26 patients in group A, B and C cleared their stones respectively. Out of these 2, 6 and 19 patients in group A, B and C respectively cleared their stones in first 2 weeks. No difference in analgesic requirement could be assessed as patient could not report it accurately. (D) Conclusions Addition of alpha-blocker along with deflazacort post ESWL for renal and upper ureteric calculi increases the stone expulsion rate and reduces the expulsion duration as shown by highly statistically significant results in group C. Further multi-institutional studies are required.

POD 26 – 06

Urolithiasis in ageing male population : correlation with BMI, diabetes mellitus and hypertension

Hrishikesh Bordoloi, Sharma D, Bagchi P, Barua SK, TP Rajeev, Baruah SJ

Gauhati Medical College, Guwahati

INTRODUCTION AND OBJECTIVE: Urolithiasis is a common disease in the young adults, but not so in the elderly population. Aging men with urolithiasis present with distinct signs and symptoms. The purpose of this case control study is to evaluate urolithiasis in the aging population and its association with body mass index, hypertension and diabetes mellitus (DM). MATERIALS AND METHODS A total of 65 male patients, 31 with urolithiasis and 34 cases without urolithiasis were evaluated in 10months period. The control group composed of men above 50years and no antecedent renal stones. It did include individuals with BPH, which could have introduced possible selection bias. All women and men with prior history of urolithiasis have been excluded. All cases were physically examined and documentation of BMI, blood investigations, X-rays, ultrasonography of abdomen and IVU's if necessary. RESULTS: The average age of the study and control arm was 59yrs and 58.38yrs with a standard deviation of 6.03yrs and 4.76yrs. The mean BMI in both the arms were 25.5and were 23.9. The association for DM hypertension and increased BMI to Urolithiasis was significant with odds ratio of 4.9778(p – 0.0053), 3.9464(p- 0.0113) and 2.53(p-0.70). CONCLUSION: Increased BMI is associated with increased incidence of metabolic disorders and increased risk of urolithiasis. There is a highly significant association between urolithiasis and DM. Further studies are required to evaluate the various causative mechanisms. The results of this study throws light to the fact that DM and hypertension are risk factors for urolithiasis in the elderly

Podium Session 27:

RENAL TRANSPLANTATION 1

POD 27 – 01

Subcentimeter renal calculi in live related donor- excellent results with bench ureteroscopy

Pushkar P, Agarwal A, Guleria S, Kumar S, Champawat P

Indraprastha Apollo Hospital, New Delhi

INTRODUCTION & OBJECTIVES: To present our experience in removal of subcentimeter renal calculi from renal allograft by retrograde intra renal surgery. METHODS: All prospective renal donor with subcentimeter (<1cm) calculi in one kidney were included in the study (n=13). All these patients underwent standard donor evaluation and metabolic work up. After the donor nephrectomy, bench retrograde intra renal surgery (RIRS) was done using rigid/flexible scope. In one patient holmium laser and in three patients pneumatic lithoclast was used for stone fragmentation. In two patients pyelotomy was done for stone retrieval. RESULTS: Stone clearance was achieved on the bench which was confirmed ureteroscopically. Time taken for the procedure ranged from 22 minutes to 49 minutes and accordingly cold ischemia time was increased. Two patients developed mild graft dysfunction on POD-2, who later recovered. All the patients were discharged on POD-7. Baseline S.creatinine at the time of discharge was 1.2 a 0.3 mg/dL. Patients were followed for 6 months post operatively. CONCLUSION: Bench RIRS is an excellent modality in the management of small renal calculi in prospective renal donors, who are not having metabolically active disease. This reduced the cost and morbidity to the donor and minimized waiting time for transplant.

POD 27 – 02

Deceased donor renal transplantation: a single centre experience

Bhat KRS, Shaheen AB, Thiruvallur PV, Periasamy P, Deepak M, Pitchaibalashanmugam K, Govindarajan P

Govt. Stanley Medical College, Chennai

Introduction The first deceased donor kidney transplant in our hospital was performed in 1996 with 74 deceased donor transplantations thereafter.

Objective To analyse Various donor and recipient characteristics with focus on vessel anatomy and type of anastomosis. • Intraoperative and post operative complications • Patient and graft survival rates of deceased donor renal transplant recipients **Materials and methods** Retrospective analysis from October 2008 to July 2014. Donor and recipient characteristics, post transplant complication and graft function were analysed. Kaplan-Meier analysis to evaluate survival rates of patient & graft at 1 year & 3 years. Results Donor age was between 12-68 years. Main cause of brain death was RTA. Recipient age was between 18-57 years. Only 19(25.67%) were females. Etiology for ESRD was not known in many, followed by CGD. Average Cold ischemia time was 8.01 (\pm 2.73) hours. 17 (22.97%) cadaveric kidney had double renal arteries of which in 10 accessory arteries were ligated, double anastomosis to External Iliac artery and Internal iliac artery was done in others. Intraoperatively one case each of mottling and impending graft rupture was encountered. Postoperatively 23(31.5%) cases had DGF and 5(6.8%) had SGF. 11(14.86%) patients developed sepsis, 7(9.5%) had pneumonitis, one case each of graft artery thrombosis and anastomotic dehiscence seen 1year Survival rates were 89.33 % and 73 % for patient and graft respectively. 3 year survival rate was 56.4 % and 44% for patient and graft respectively. **Conclusion** The survival rates of Deceased donor transplant comparable to Live related renal transplantation.

POD 27 – 03

Robotic kidney transplantation with regional hypothermia: where do we stand after 1 year?

Feroz Amir Zafar, Prasun Ghosh, Saurabh Jain, Manav Suryavanshi, Rakesh Khera, Rajesh Ahlawat

Medanta – The Medicity, Gurgaon

INTRODUCTION AND OBJECTIVES: Kidney donors have enjoyed the benefits of minimally invasive surgery for a long time while minimally invasive approaches to kidney transplantation (KT) have been a recent innovation. We recently developed and described a novel technique of robotic KT (RKT) using intra corporeal graft cooling. We compared effectiveness of RKT and open KT (OKT) by evaluating peri and post-operative outcomes over 1 year period. **METHODS:** 225 out of the total of 247 patients with end stage renal disease who met the selection criteria underwent kidney transplant from Jan-Dec 2013 at our institute. Data was prospectively analyzed for 50 and 175 patients who underwent Robotic and open transplant respectively and completed a minimum of 6 months followup. **RESULTS:** The basic characteristics of the two groups were comparable. Mean serum creatinine at discharge was 1.3 and 1.2 mg/dl in RKT and OKT patients respectively ($p=0.71$) and at 1 year was 1.2 and 1.1 respectively ($p=0.34$). Post-operative pain and analgesic requirements were significantly less in patients undergoing RKT ($p=0.01$). One (2%) patient of RKT and 4 (2.2%) of OKT needed post transplant dialysis. No lymphocele was detected in protocol non contrast CT done at 3 months in the RKT group (0% vs. 23.8%; $p=0.05$). One graft was lost in the OKT group. One patient death in RKT (1.5 months post transplant, cardiac failure) and 2 in OKT group were noted respectively. **CONCLUSIONS:** RKT with regional hypothermia is safe and easily reproducible. One year outcomes are equivalent to OKT; with trends towards low complications, quicker graft function recovery and shorter patient convalescence

POD 27 – 04

Study on stabilization of kidney function after live donor nephrectomy

Bose, Abhishek, Aulakh, Navpreet; Randhwa, Simran; Sikka, Shagun; Aulakh, Baldev Singh

Dayanand Medical College and Hospital, Ludhiana

Objectives: To evaluate the pattern of renal function recovery in live donors after nephrectomy. **Methods:** We retrospectively evaluated 169 donor from the year 2010 to 2013. Detailed evaluation of donor was done before taking them for the donor nephrectomy. We estimated glomerular filtration rate (GFR) using Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation. The trends of serum creatinine, hemoglobin and GFR in both male and female donors was analyzed. The time at which renal function recovery became stable was determined. **Results:** There were 136 female donors and 33 male donors in our study. When we compared the difference of means using student t test, we found significant difference in the mean preoperative serum creatinine and mean serum creatinine at one month in overall population

(p value < 0.05). Similarly when we compared mean serum creatinine at one month with that at two month we found it be significant (p value = 0.013). In the female population found a similar trend, however in the male population we observed no significant difference of means between the mean serum creatinine at one and two months (p value= 0.92) also there was no significant difference of mean at two and three months (p value 0.97). The mean GFR followed the similar trend. **Conclusion:** Serum creatinine and GFR appears to stabilise at one month in males and in two months in females after nephrectomy. Two months should be considered as the ideal time for kidney function stabilization after donor nephrectomy.

POD 27 – 05

Sonographic evaluation and correlation with subsequent radiocephalic fistula outcome

Althaf Hussain K, Dr.Ravichandran R, Dr. Sampath Kumar

Meenakshi Mission Hospital and Research Centre, Madurai

Sonographic evaluation and correlation with subsequent radiocephalic fistula outcome Althaf Hussain K, Ravichandran R, Sampath Kumar Meenakshi mission hospital and research centre, Madurai **Introduction:** For the establishment of long term haemodialysis vascular access in patients with end stage renal failure, the Cimino-Brescia radio-cephalic arteriovenous fistula is the method of choice. However, a significant percentage (up to 30%) of fistulae fail early within 3 months of surgery. This present study was designed to address the factors predicting the patency of arteriovenous fistula (AVF) and its adequacy. The present study focus on the duplex assessment of the artery size and vein size in radiocephalic fistula and clinical outcomes.

Materials and methods: We prospectively studied 100 CKD patients who have undergone radiocephalic fistulas with both preop and postop ultrasonography to assess clinical outcomes. Analysis of cephalic vein and radial artery diameters and flow rate preop and postop and consideration of other factors like age, sex, comorbidities, vessel wall characteristics taken into account. **Results:** The mean age of our patients were 49.9 years. Females had a slightly higher failure rate than men ($P=0.33$ not statistically significant). Radial artery diameter >0.21 mm had high fistula success rate ($P<0.001$). Cephalic vein diameter >0.20 mm had high success rate ($P<0.001$). PSV >50cm/s had higher success rate ($P=0.80$). Flow rate of radial artery >60ml/min had higher success rate. **Conclusions:** Size of the artery and vein are the primary key factors in the outcome of radiocephalic AVF. Duplex scan definitely helps in predicting the clinical outcome of AVF. Duplex surveillance is necessary before selection and doing AVF.

POD 27 – 06

An Innovative Cost Effective Technique of Right Laparoscopic Donor Nephrectomy

George AJP, Devasia A, Singh JC

CMC Vellore

Introduction : Laparoscopic right donor nephrectomy is a challenge with the shorter right renal vein and expensive when endovascular staplers or hand ports (for hand assisted laparoscopic donor nephrectomy) are used. **Objective :** The objective of the video is to present a cost effective, easily reproducible, safe, innovative way of performing the right hand assisted laparoscopic donor nephrectomy. **Material & Methods :** An Opsite to cover, the left gloved hand, upto the elbow. An umbilical skin incision and rectus incision sufficient for introduction of the operators left hand and forearm. Standard laparoscopic donor nephrectomy equipment. Method demonstrated in the video. **Video Presentation Conclusion :** Right Hand Assisted Laparoscopic Donor Nephrectomy using this innovative approach is safe, cost effective and easily learnt.

Podium Session 28: RECONSTRUCTIVE UROLOGY 1

POD 28 – 01

Santosh PGI pouch : A new innovation in urinary diversion

Santosh Kumar, Sudheer Devana

PGIMER, Chandigarh

Purpose: To know the feasibility and outcome of Santosh PGI pouch as a new innovative technique of continent cutaneous diversion (CCD) following cystectomy. **Materials and methods:** Nine patients (Eight with carcinoma bladder and one with extrophy bladder) underwent CCD using the Santosh PGI pouch after cystectomy. A 45-cm segment of terminal ileum was isolated 15-20 cm proximal to the ileocaecal junction. The ileal segment was folded in the form of 'S' configuration. On the antimesenteric border three longitudinal incisions were given of about 7 cm length. The terminal 8 cm of the distal part of the pouch was used for creating the intussuscepted nipple valve. Demucosalization of the interior of the nipple, fixing the nipple valve with the serosa of the pouch wall and wrapping of the catheterizable channel with pouch wall for providing continence was done. The ureteropouch anastomosis was done using the serosal lined tunnel technique. The catheterizable channel was brought out through the right rectus muscle via an oblique subfascial tunnel and was fixed to the rectus sheath. **Results:** No significant complication was noted in pouch reconstruction. Duration of pouch reconstruction was around 75-110 min. Postoperatively one patient had UTI on follow up. All patients were doing regular CIC with acceptable continence of upto 350 ml. No ureteroileal anastomotic stricture or difficulty in catheterizing the pouch was seen in any of the patients. **Conclusion:** The Santosh PGI pouch which is a type of CCD was technically feasible, easy to reconstruct with acceptable continence and offers minimal morbidity.

POD 28 – 02

Clavien classification of buccal mucosal onlay urethroplasty complications: a prospective study

Bhavani Shankar.G, Tyagi.A, Anil kumar.N, Syam Sundar.T

Sri Venkateswara Institute of Medical Sciences, Tirupati

Objective: To prospectively report and grade the post operative complications of buccal mucosal onlay urethroplasty with the modified Clavien classification system. **Materials and methods:** From August 2012 to January 2014, the prospective data from all patients who underwent buccal mucosal onlay urethroplasty at Sri Venkateswara Institute of Medical Sciences, Tirupati was collected and analysed. The data recorded included patient demographics, stricture length, early complications, post operative flow rates, late complications and stricture recurrence. **Results:** A total of 54 patients underwent urethroplasty with a mean follow up of 10 months. Grade 1, 2, 3a and 3b complications were encountered in 25 (46.3%), 14 (25.9%), 4 (7.4%) and 6(11.1%) patients, respectively. No grade 4 complication was observed. Early complications occurred in 40%, but only 7.4% were Clavien grade 3a. Early complications included urinary tract infection in 2 (3.7%), epididymitis in 2 (3.7%), scrotal pain in 4 (7.4%), small wound dehiscence requiring closure in 2 (3.7%) and post void leak, retrograde urethrogram leak, hematuria and perineal hypoesthesia in 3(5.5%). Late complications occurred in 19 (35%) of which erectile dysfunction (PDE5 responsive) was seen in 11 (20.3%), recurrence of stricture in 7 (12.9%) and chordee in 1 (1.8%). **Conclusions:** Most complications were grade 1 and 2. Grade 3a complications occurred in early post operative period and grade 4b was seen in late post operative period. While all the early complications were resolved, less than half of the late complications required intervention. These complication rates should be considered when counselling urethroplasty patients.

POD 28 – 03

Anastomotic Urethroplasty with Laparoscopic Omentoplasty for Complex Posterior Urethral Strictures-A Novel Technique

Kulkarni Sanjay

Kulkarni Reconstructive Urology Center, Pune

Introduction: Failure after redo-anastomotic perineal urethroplasty in PFUDD is due to presence of scar tissue, absence of adequate vascularization and supple tissue around urethra. Omentoplasty requires abdomino-perineal approach. Transpubic approach is fraught with complications. We describe novel technique of perineal approach with laparoscopic omental transposition for failed PFUDD **Materials and methods:** This is a prospective, observational study from Jan-Dec 2012. Patients with complex posterior urethral strictures were included. 2 teams performed surgery

simultaneously. Perineal approach for urethroplasty and laparoscopic mobilization of omentum. After pubectomy abdomino perineal window was created and omentum transposed to perineum. The primary outcome was to evaluate the success rate with a secondary outcome of evaluating feasibility and safety. Clinical outcome was considered a failure when any postoperative instrumentation was needed. **Results:** Twelve male patients with a median age of 19 years were included. All patients underwent elaborated bulbo-prostatic anastomosis using a perineal approach and inferior pubectomy combined with laparoscopic mobilization of the omental wrap into the perineum to envelope the anastomosis and the perineal cavity. Success rate was 91.7% (11/12). There was no significant difference in outcome between paediatric (6) and adult cases (6). One (8.3%) adolescent boy, 14 years old, developed a recurrent stricture 2 months after the procedure and was managed by internal urethrotomy. Median follow up was 18 months. **Conclusions:** Patients with complex traumatic posterior urethral strictures showed promising results following perineal urethroplasty combined with laparoscopic omentoplasty. This avoids abdominal incision and subsequent complications. The feasibility and safety of this new procedure was excellent.

POD 28 – 04

Outcomes of hypospadias repair children versus adult - a single centre experience

Singh Siddharth, Sankhwar S.N, Singh V, Kumar M, Singh B.P, Kanodia Gautam, Jhanwar A

KGMU Lucknow

INTRODUCTION AND OBJECTIVE Arrested penile development is believed to result in proximal penile meatus leading to hypospadias. Primary and reoperative hypospadias repairs in adults done using the same techniques as in children are reported to have higher complication rates. Some studies suggest subglanular hypospadias repair in adults, especially to avoid staged procedures. **Objective** of present study to compare outcome of hypospadias repair in children and adults. **MATERIAL AND METHODS** Study was conducted in Department of Urology KGMU Lucknow from January 2010 to June 2014. A total of 121 patients were included in the study, out of this 98 were children and 23 were adults. Patients were divided in to Group1- constitutes children (Tanner 1, 2 and 3) which comprises 98 patients and Group2- constitutes adults (Tanner 4 and 5) which comprises 23 patients. Factors including patient age, pubertal stage, meatal location, primary or reoperative hypospadias, type of surgical repair and urethroplasty complications (fistula, meatal stenosis, neourethral stricture, glans dehiscence) were recorded. Patients with follow up less than 1 month were excluded from study. **RESULTS** Overall complications for various techniques of hypospadias repair were not significantly different in children and adults and results of different types of hypospadias repairs are not different in adults and children (p value not significant). **CONCLUSION** We conclude from the study, that- Overall outcome of hypospadias surgery is not significantly poor in adults than children. There is no association of pubertal status and type of surgery on hypospadias repair outcome.

POD 28 – 05

Management of post-traumatic long segment ureteric stricture

Sunirmal Choudhury, Malay Kumar Bera

IPGMER, Kolkata

Introduction and objective: Surgical management of post-traumatic long segment ureteric stricture is challenging. We present our experience of managing such cases. **Materials and Methods:** From July 2011 to June 2014, six cases of long segment ureteric strictures were managed. Three of them presented with ureteric avulsion during ureteroscopy, two of them has got blunt abdominal trauma and another one has got ureteral avulsion during removal of pelvic tumour. All the patients were initially managed with percutaneous nephrostomy. Open surgical repair were attempted 10-12 weeks following surgery. Five patients had undergone ileal replacement and one patient of post ureteroscopy ureteric avulsion had been managed with Boari flap. For ileal replacement 10-15 cm of distal ileal segment 15 cm away from ileocaecal valve were used and wide-open refluxing anastomosis were made. **Results:** All of the patients have excellent surgical outcome. Patients suffered minor complications in postoperative period. Nephrostomy tube were kept postoperatively on all of them and nephrostogram was performed three

weeks post surgery which showed prompt distal flow of contrast without any leak. Patients were followed up postoperatively with blood biochemistry and ultrasonography and all of them are doing well. Conclusions: Post traumatic long segment ureteric stricture can be successfully managed with delayed repair using ileal replacement and also Boari flap. Strict preoperative and postoperative vigilance is required to prevent complications.

POD 28 – 06

Outcomes of anastomotic urethroplasty

Mukherjee P, George AJP, Berry CJ, Santosh K, Devasia A, Kekre NS

Christian Medical College, Vellore

Introduction and objectives: Urethral distraction injuries associated with pelvic fracture pose a difficult urological challenge for treatment. The outcomes are guarded, at best, and are confounded by various factors. We analyzed our experience with the treatment and outcomes of pelvic fracture urethral distraction defects. Materials and method: All patients who had undergone anastomotic urethroplasty from January 2006 to December 2012 at our institution were included. The data was tabulated retrospectively from our electronic data base. Results: 123 patients with a mean age of 33 years, 9 (Range 15-65) underwent PPU in this period. Retrospective data was obtained for 108 of these. 27 (21%) of these were re-do urethroplasties and 8 (7%) had undergone attempted primary realignment after injury. Success was defined as a maximum flow rate of more than 10 ml/sec after catheter removal. The success rate was 55% among the patients undergoing redo urethroplasties. Among those undergoing primary repair the success rate was 71%. At least 48% had poor or absent erections at presentation. 31% had an immediate post operative Q_{max} flow of 20 ml/sec. 34% patients had follow up for more than 6 months. The 15% patients had a Clavien Dindo morbidity of Grade 3. Conclusions: Anastomotic urethroplasty has good results for primary repairs. Majority of secondary operations also have good outcomes.

Podium Session 29: RECONSTRUCTIVE UROLOGY 2

POD 29 – 01

Newer method of distention of bladder diverticulum for deliniation during diverticulectomy

Anil Takvani, Dr. Chetan Gokani, Dr. Pradip Malavia

Takvani Kidney Hospital, Junagadh

Objective: To demonstrate innovative and new techniques of delineation of large or huge bladder diverticulum to facilitate dissection of diverticulum from all structures around it during diverticulectomy. Material and Methods: In last 15 years practicing at single center 14 large diverticulum removed as it was deemed indicated. Diverticuli were quite big in size. We used saline to fill the diverticulum via Foley's catheter placed in to diverticulum. Balloon of catheter was inflated to 30 to 50 cc and traction was applied to block neck of diverticulum so saline do not escape to bladder. Catheter can be placed in opened bladder directly in to diverticulum. Otherwise if we have not opened the bladder at beginning one can insert the catheter with the help of cystoscope entered into diverticulum and guide wire is placed into diverticulum. Subsequently Foley's catheter was threaded on the guide wire up to lumen of diverticulum. Discussion: This is a very easy and very faster way of distending diverticulum. Bladder remains empty. This facilitates dissection of diverticulum as bladder is not occupying dissection area. It provides uniform walls of diverticulum so dissection of structures like ureter, peritoneum and bowels from walls becomes easier. We can increase or decrease distention by controlling amount of saline within diverticulum as per the need. Conclusion: This method of distention of bladder diverticulum has many advantages and it is easy to perform. One can avoid use of sophisticated gadgets and also can work easily as bladder is not inflated simultaneously.

POD 29 – 02

Overview of late complications of hypospadias repair at our centre

Rajeev Kumar

SP Medical College, Bikaner

Objective Incidence of late complications of hypospadias depending upon type of hypospadias, technique of repair and age of presentation of the patients. Our objective is to know the relation of late complications with above variables. Material and method We retrospectively reviewed the 484 operated patients of primary hypospadias from 2005 to 2013. Inclusion criteria of study is cases which is primary type. Result Mean age of the patients was 8.52 yrs. The mean hospital stay was 8-10 days and follow up ranged from 6 months to 9.5 yrs. Patients in age group 0-5 yrs, 5-10 yrs, 10-15 yrs and above 15 yrs are 165, 193, 85 and 41 respectively. Patients in distal, mid-penile and proximal hypospadias is 334, 58, 92 respectively. Curvature was seen in 313 and torque in 219. Late complications (Total 30) were fistula in 20, meatal stenosis in 4, stricture urethra in 3 and residual chordae in 8 cases. Complications were seen in 7 in distal penile, 9 in mid penile and 19 in proximal type. According to age, in 0-5 yrs., 5-10 yrs., 10-15 yrs, >15 yrs number of complications were 2, 8, 10, 15 respectively. Conclusion Complications are more common in patients presenting with proximal type of hypospadias, greater degree of curvature and torsion as well as in greater age of surgery.

POD 29 – 03

Mamokaths in urological practice: our experience and out come

Prashant Kumar Singh, PBSingh, Pawan Kesharwani, Jagdeep Balyan, Jigyasa Singh

Max Superspeciality Hospital Delhi

Total 18 patients underwent mamokath insertion. Four patients were having long stricture of ureter and were being managed by replacement of DJ stent every 3 months. They were offered either reconstructive procedure or mamokath insertion and they opted for latter. Three patients had BPH with indwelling catheters varying between period of 3 month to yr. They were cardiac cripple and where denied any endoscopic surgery for prostate. They agreed to undergo prostatic stent under sedation. Six patients had bulbar urethral stricture. One young patient had haemophilia with bulbar urethral stricture. He was not agreeing to urethroplasty and OIU with frequent dilataion was not possible due to haemophilia. He underwent laser urethrotomy with mamokath insertion. Remaining 5 elderly patients had stricture and they were on regular dilatation after urethrotomy. Five patients had penile or penobulbar urethral stricture and they opted for mamokath insertion. Out of 4 ureteral stents with average length of 13cm, 2 are doing well with followup from 13 months to 30 months. Third patient did well up to 9 months and then reported in emergency with total incontinence of urine. Plain X-ray abdomen revealed migration of stent with one end lying in bladder and other end in peno-bulbar region. Patients was prepared for removal of stent. All three patients voided after prostatic stent. All three now have follow-up varying from 6 month to 19th months. Two patients are having good flow with peak flow rate (PFR) of 12 and 14 ml/sec. Third patients is able to void with PFR of 8ml. Plain X-ray revealed little upward migration of expanded lower end. Out of six patient with follow-up varying between 6 month to 38 months, 3 patients are doing well. They are in regular follow-up and are voiding with good flow. They feel mild abnormal sensation in urethra but are able to All four patients with penile urethral stents are doing well. They also feel abnormal sensation in urethra but tolerable. One patient report mild pain during erection.

POD 29 – 04

Current role of bracka's two stage hypospadias repair

Shaikh Irfan A, Chaudhari R, Sharma A, Desai R, Andankar M G, Pathak H R

T.N Medical College & B.Y.L.Nair Hospital, Mumbai

Introduction Treatment protocol for hypospadias is not standardized. One of the major dispute is between single stage vs. two stage repair. There is a renewed interest in the two-stage repair, as it seems to be able to both reduce morbidity and improve cosmesis in the correction of the most severe forms of hypospadias. Objective Objective is to analyse outcome of two stage repair of hypospadias and compare it with single stage repairs. Material and methods We retrospectively reviewed the records of all patients which underwent hypospadias repair between Aug 2011-July 2014. Results A total of 55 patients were treated of which 32 underwent

single stage repair while 23 underwent staged repair. Average age for single stage is 8 year(2 months-20 yrs) while that of two stage repair is 13 years (2-26 yrs) 32 patients underwent single stage repair (penoscrotal 5, proximal penile 7, midpenile 2, distal penile 12, coronal 6). 14 had Snodgrass repair, 14 Asopa's repair and 4 patients underwent MAGPI. 13 patients developed fistula and 3 patients developed meatal stenosis. 23 patients underwent two staged repair (perineal 2, penoscrotal 11, proximal penile 1, midpenile 2, distal penile 3, coronal 4). All of patients underwent Bracka's repair or one of its modification with placement of inner prepuccial graft, post auricular graft, buccal mucosal graft. 5 patients developed fistula, 2 developed meatal stenosis 1 patient had poor graft uptake of inner prepuccial graft he was managed by repeat grafting with postauricular graft. One patient has to undergo re-grafting with post auricular graft due to failed postauricular graft. No patient developed donor site complications. Conclusion Two stage repair for hypospadias should be considered in selected patients to avoid morbidity associated with failed single stage repair

POD 29 – 05

Evaluation of sexual function in urethral stricture patients undergoing urethral reconstructive surgery

Nikhil Ranjan, Rana Pratap Singh, Mahendra Singh, R Tiwary, Vijoy Kumar, Rohit Upadhayay

IGIMS, Patna

Objective: to evaluate the effect of urethral reconstructive surgery on sexual function of urethral stricture patients. Material and methods: the study group consisted of 60 men who underwent urethral reconstructive surgery at IGIMS. The mean follow up was of one year. The patients preoperative sexual function was assessed by international index of erectile dysfunction questionnaire (IIEF) and they were again administered the questionnaire at one and six months. Results: overall there is a significant improvement in patients sexual function after urethroplasty. Most patients had evidence of sexual activity before surgery except the subgroup with posterior urethral strictures and this group also failed to show much improvement after surgery.

POD 29 – 06

Universal solution for hypospadias repair

Amrendra Pathak, Saurabh Jain, Kumar Rajesh Ranjan, Aaron Jain, Omprakash

Hindu Rao Hospital, New Delhi

INTRODUCTION There has been a significant change in repair of hypospadias over last 15 years. From complete substitution to augmentation and finally complete reconstruction has been adopted by majority of surgeons. Our aim in this study is to highlight the versatility and simplicity of reconstructive techniques like Snodgrass/TIP (tubularised incised plate), Mathieu and Thiersch duplay. Complete substitution urethroplasty like Tubularised preputial flap, and new complete lifting, incision and tubularisation of urethral plate for proximal hypospadias with severe chordee (Prieto J) etc. are technically difficult and have high complication rates leading to high acceptance of TIP repair by majority of surgeons. **METHODS AND RESULTS** Between 2004 to 2013, we repaired 150 cases of hypospadias with different techniques. 115 cases underwent primary repair (repaired for first time by us) and 35 cases had secondary repair (unsuccessful repair outside in the past). Dorsal plication was done to correct mild to moderate chordee. For second layer covering dartos, tunica vaginalis or both were used. 10 cases of scrotal and perineal hypospadias with severe chordee were corrected by 2 stage repair. In first stage complete division of urethral plate and covering with adjoining penile skin or buccal mucosa was done followed by TIP repair in second stage. 15 cases of hypospadias cripple were managed by complete excision of scarred urethral plate/skin and raw area was covered with buccal mucosa and adjoining skin. 2nd stage repair was done by Thiersch duplay technique with good results. 12.67% developed complications like fistula, edema of preputial skin, complete breakdown of repair, meatal stenosis & urethral stricture. **CONCLUSION** Single stage repair for distal, middle and proximal hypospadias with or without mild to moderate chordee can be easily managed by TIP and Mathieu technique. Two stage procedure are simple, safe and easy to perform for proximal hypospadias with severe chordee and hypospadias cripple with very high success rate. In absence of

healthy inadequate dartos, use of tunica vaginalis has significantly reduced the incidence of fistula. Age old versatile procedure like Thie

Podium Session 30: RENAL TRANSPLANTATION 2

POD 30 – 01

The correlation of renal allograft weight to metabolic index ratios and glomerular filtration rate among living-related kidney transplant patients: a cross-sectional study.

Kaje YD, Patwardhan SK, Ismail MA, Singh AG, Shelke UR

SMC/KEMH, Mumbai

OBJECTIVE: To determine a relationship between the ratios of renal allograft weight (RAW) and metabolic indices: specifically, recipient body weight (RBW), recipient body mass index (RBMI), and recipient body surface area (RBSA), and postoperative renal function as measured by glomerular filtration rate (GFR). It also sought to determine which of the 3 ratios, and the minimum ratio, that was predictive of a good GFR. **METHODS:** This prospective study was performed among living related kidney transplant patients who did not manifest rejection, ischemic injury, or postoperative morbidity and mortality from January 2013 to July 2014. The harvested kidney was weighed after a cold bath and then transplanted by a single surgical team. The 3 ratios, RAW/RBW, RAW/RBMI, and RAW/RBSA were correlated with GFR based on serum creatinine at discharge and at 6 months follow-up. Statistical analysis used STATA 7 and the Pearson correlation using linear regression analysis. **RESULTS:** Of the 3 ratios, RAW/RBW best predicted GFR. The minimum RAW/RBW ratio that predicted good GFR (>90 mL/min) at 6 month follow-up was 7.6 (accuracy 88.6%; P = .004). **CONCLUSION:** Of the 3 ratios, only RAW/RBW was useful to predict GFR. A minimum RAW/RBW ratio of 7.6 predicted a good GFR at 6 months postoperatively. The findings suggested that transplanting a small kidney into a heavy patient may be a risk factor for allograft failure and that having a high initial ratio (> or =7.6) of renal allograft weight to initial recipient body weight was an advantage.

POD 30 – 02

A prospective study comparing transperitoneal vs retroperitoneal laparoscopic donor nephrectomy

Gogoi Debojit, Choudhury Sunirmal, Ghose Bastab, Pal Dilip, Bera Malay

Institute of Post Graduate Medical Education & Research, Kolkata

Introduction and objective- Laparoscopic donor nephrectomy can be performed either transperitoneal or retroperitoneal approach. Each of these approaches has its own advantages and needs different anatomical orientation. However no study has been carried out till now comparing these two approaches. **Material and methods:** It is a prospective observational study. Selection of approach is decided by the operating surgeon. Usually left side is selected for transperitoneal and right side is selected for retroperitoneal donor nephrectomy. Presence of double renal artery in the left side is selected for retroperitoneal approach. From February 2013 to August 2014 we performed 28 laparoscopic donor nephrectomy (20 transperitoneal; 8 retroperitoneal). There were 27 females and 1 male. Their mean age was 42.38 years. All patients underwent peripheral venous blood sampling preoperatively and 24 hours postoperatively. These were analyzed for C-reactive protein (CRP), interleukin-6 (IL-6), total leukocyte count (TLC) blood urea nitrogen (BUN) and serum creatinine (Sr. Cr). **Operative time, warm ischemia time, hospital stay, requirement of analgesia and complications are recorded. Results-** In the transperitoneal group the mean operative time was 179.5 Minutes (150 to 210 Minutes), mean warm ischemia time was 189.0 Seconds. In the retroperitoneal group the mean operative time was 175 minutes (160 to 210 minutes), mean warm ischemia was 117.5 seconds. **Conclusion-** Postoperative Inflammatory markers (IL-6, CRP, TLC), BUN and Sr. Cr raise in both of these approaches but there is no significant difference observed between these two approaches. Post operative hospital stay and requirement of analgesia is more in retroperitoneal approach.

POD 30 – 03**Modified vascular stapler for venous control during right sided retroperitoneal laparoscopic donor nephrectomy****Rizvi SJ, Valsangkar R, Goyal NK, Qadri SJ, Pal BC, Modi PR, Bhandari NS**

Institute of Kidney Diseases and Research Centre & Institute of Transplantation Sciences, Ahmedabad

Introduction & objectives: Laparoscopic donor nephrectomy, retroperitoneal or transperitoneal, is increasingly accepted as the standard of care for retrieval of kidneys from living donors. Critical to safe surgery and obtaining a good length of renal vein on the right side is the use of a laparoscopic vascular TA stapler firing three rows of staples. Recent non-availability of a laparoscopic vascular TA stapler has hampered performance of right retroperitoneal laparoscopic donor nephrectomy (RRLDN) at our institute. Hence we modified another commercially available laparoscopic vascular stapler firing six rows of staples for use in RRLDN. **Materials and methods:** a laparoscopic vascular stapler firing six rows of staples was modified by mechanically removing the pins from three of the rows on the kidney side using a needle, without disturbing the pusher mechanism of the stapler. After testing the modified stapler during laparoscopic simple nephrectomies, it was used in eight consecutive RRLDNs. **Results:** all RRLDNs were completed successfully, the modified stapler successfully laying down three rows of pins on the IVC. Hemostasis was adequate in all cases. Warm ischaemia times ranged from 2'54" to 5'22" (mean 3'35"). An adequate length of renal vein was obtained in all cases, which allowed for easy recipient surgery, and all grafts had prompt function. There were no complications in the donor or recipient. **Conclusion:** our experience demonstrates the safety a modified laparoscopic stapler, which is critical for donor safety. Such modifications reduce dependence on devices from one particular manufacturer for uninterrupted continuation of a laparoscopic donor program.

POD 30 – 04**Transplant in posterior urethral valve (PUV) patients: an institutional experience of 14 cases****Valsangkar R S, Goyal N K, Rizvi S J, Modi P R, Khemchandani S, Bhandari N S**

Institute of Kidney Diseases and Research Centre and Institute of Transplantation Sciences, Ahmedabad

Introduction and objective: Posterior urethral valve is an important cause of end stage renal disease in pediatric population. These patients tend to have recurrent urinary tract infections, dilated upper tracts and abnormal bladder behavior and voiding. These factors are especially a concern with regards to graft damage post transplant. We analyzed PUV cases who underwent renal transplantation keeping in mind these factors. **Methods:** This is retrospective analysis of PUV cases who underwent renal transplant at our centre from 2000 to 2012. Data was accrued and analyzed with regards to age of PUV fulguration, age at renal transplant, any pre-transplant nephrectomy, and for urodynamics studies pre-transplant. Transplant details specifically regarding ureter reimplantation were noted. Postoperatively and in follow up, creatinine, post void residue were noted along with monitoring for development of hydronephrosis. **Results:** Data analysis of 14 cases showed mean age at PUV fulguration and renal transplant being 3 yr and 16 yr respectively. 11 patients required pre transplant nephrectomy. Stentless ureter reimplantation was done in 11 of 14 cases. All patients voided well with insignificant PVR. Mean serum creatinine was 1.3 mg% at end of mean follow up of 4.5 yr. **Conclusion:** Renal transplant in PUV cases is associated with good graft outcome. Many of these patients need pretransplant nephrectomy. Routine urodynamic studies are not necessary. Stentless ureter reimplantation is safe to do in such patients.

POD 30 – 05**Predictors of erectile dysfunction in renal transplant recipients-a retrospective study****Chirra R Reddy, Rahul D, Ramchandriah G, Vidyasagar S, RamReddy Ch, Padmaja D, Murthy PVLN**

Nizams Institute of Medical Sciences, Hyderabad

A)INTRODUCTION & OBJECTIVE: Sexual dysfunction is common in men with chronic renal failure.significant improvement of sexual function

has been reported after renal transplantation.Recent studies investigated the prevalence of erectile dysfunction after renal transplantation indicate that it is still high and clinically relevant ranging from 48 to 56%. The objective of this study was to determine the prevalence and predictors of ED in post renal transplant recipients at our institute. **B)METHODS:**We conducted a retrospective study of male renal transplant recipients(90) who underwent live related renal transplant from jan,2011 till dec,2012. erectile function was evaluated using sexual health inventory for men (SHIM)-IIEF 5 short form questionnaire.patients were also screened for depression using Becks depression inventory.The categorical data were compared between those with erectile dysfunction and without using Chi-square test and continuous data were compared between the groups using independent sample t-test. The variables with significant difference (p<0.05) were entered into multivariate regression by forward conditional approach to identify independent predictors of erectile dysfunction after renal transplant. **RESULTS:**This study involved 90 patients out of a total of 134 patients who underwent renal transplant between 2011-12.Age, marital status, creatinine level, DM, HTN, treatment with beta blockers, depression were significant on univariate analysis. Multivariate regression identified age (odds ratio 1.26), treatment with beta blockers(odds ratio 8.7) and depression (odds ratio 2.6) as independent predictors of erectile dysfunction (model R2-0.66) **CONCLUSION:**The causes of ED is multifactorial with increasing age,depression & treatment with beta blockers for hypertension significantly predicting the risk of ED in renal transplant pts.

POD 30 – 06**A prospective comparative study of early outcome of open, laparoscopic and robot assisted renal transplantation****Sarmah A J, Pal BC, Rizvi J, Modi P, Bhandari N S**

Institute of Kidney Diseases and Research Center, Civil Hospital, Ahmedabad

Introduction: Over the last three decades, laparoscopic surgery has rapidly expanded in clinical practice, replacing open surgical procedures in a number of areas of abdominal surgery. Complex laparoscopic surgery can be successfully performed after undertaking appropriate training. The limited published data have suggested that laparoscopic/robotic kidney transplant may offer the advantages of less pain, better cosmesis, possible shorter hospital stay, and fewer wound complications, without compromising graft function. Although the first robotic assisted kidney transplant was done with a conventional open incision, it nevertheless evoked a surgical revolution in kidney transplant. **Aim and objective:** To compare the intra-operative, immediate post-operative and early outcome of open, laparoscopic and robot assisted renal transplantation prospectively. **Material and methods:** In the last 6 months (March to August) ESRD patients operated with open, laparoscopic and robot assisted renal transplant performed from living donor were prospectively evaluated during intra-operatively and immediate and late postoperative period. During intra-operative period patients were monitored for OT time, vascular anastomosis time, warm ischemia time, any complication and need for conversion to open. All the patients were monitored during early post-operative period with visual analogue score (VAS) for pain and wound complication. Early graft function is monitored with serum creatinin level. Statistical analysis is performed using SPSS (12.0 version). Continuous values are presented as mean (SD) and compared using ANOVA (Analysis Of Variants). P- value less than 0.05 is considered to be statistically significant. **Results and observation:** During the last 6 months, total 62 renal transplantations has been performed out of which 31 open kidney transplantation (OKT), 18 laparoscopic kidney transplantation (LKT), and 13 robot assisted renal transplantation. In open transplantation group (n 31) mean age was 32.7 ranging from 12years to 55 years. Mean operation room time was 195 min, anastomosis time 28.4 min and cold ischemia time 75.26 min with average blood loss of 92.33 ml. In laparoscopic transplantation group (n18) mean age was 33.94 (18-50 years). Mean operation room time was 206.11min, anastomosis time was 47.66min, cold ischemia time 87.66 min and average blood loss was 68.33 ml. In robotic transplantation group (n 13) the mean age was 34.06 ranging from 10 years to 60 years, mean operation room time was 300 min, anastomosis time 39 min (32- 55 min), cold ischemia time 44 min with average blood loss of 75 ml. Therefore, there is significant difference in anastomosis time between the three groups.less in OKT group than that of the LKT and RKT group. Blood loss is significantly less in robotic and

laparoscopic group in comparison to open group. But operation room time was significantly ($p < 0.05$) higher in robotic transplantation group. This is because of extra time that is required for docking and undocking of robot twice during the procedure. During the early post operative period although there is no significant difference in visual analogue scale for pain in immediate period among the three group, from 1st post operative day onward there is significant reduction in pain score in laparoscopic and robotic group in comparison to the open group. In the assessment of early graft function with serum creatinin level there is no significant difference ($p > 0.05$) in serum creatinin level in three group in 7th post-operative day, at one month and at three month follow up.

Podium Session 31: URO ONCOLOGY 4

POD 31 – 01

To study the role of image guided biopsy in the management of T1 renal masses

Deshpande A V, Nirmal TJ, Mukha R, Chandra Singh J, Santosh Kumar, Devasia A, Kekre N S

CMC Vellore

AIM: The aim of our study was to compare imaging guided biopsy (IGB) outcome with final histopathological outcome. **MATERIAL AND METHODS:** We included all patients with renal mass ≤ 7 cm. Patients with metastatic disease, patients who are not willing, with deranged coagulation profile and tumour > 7 cm were excluded. Patients underwent image guided percutaneous renal mass biopsy. Patients were monitored for the immediate post procedure complications. Irrespective of the histology, all the patient underwent surgery. The histological findings of the biopsy and the surgical specimen were compared. **RESULTS:** Out of 25 biopsies, 20 biopsies showed RCC, this corresponded with final histological outcome. 3 patients were reported to have hybrid oncocytolytic variant; 2 patients had oncocytoma and the third one had chromophobe RCC. 2 samples which were inadequate for interpretation revealed lipid poor angiomyolipoma and clear cell RCC on final histology. Sensitivity, specificity, PPV and NPV for the detection of malignancy by core biopsy were 92%, 100%, 10%, 33% respectively. The accuracy of the core biopsy is 100% however the accuracy for the differentiation of Fuhrman grade was 76%. **CONCLUSIONS:** Approximately 12% of renal masses excised surgically were benign, suggesting that surgery could have been deferred, if the histology of the mass was known beforehand. IGB has high sensitivity, specificity and accuracy in detecting histology of renal masses. Post procedure complications were relatively uncommon, encouraging us for its wider adoption. **Key words:** Image guided biopsy, T1 renal masses, final histology, Sensitivity, specificity

POD 31 – 02

Orthotopic neobladder reconstruction with sigmoid colon after radical cystectomy: our center experience

Kanodia Gautam, Singh Vishvajeet, Sinha Rahul Janak, Goel Apul, Singh Manmeet, Sharma, Pradeep, Singh Siddharth

King George's Medical College, Lucknow

INTRODUCTION AND OBJECTIVE: To date, various types of neobladder reconstruction have been described using different bowel segments. Superiority of one technique over other remains debatable without clear guidelines. Objective of the current study is to prospectively evaluate the outcome of sigmoid colon neobladder reconstruction (SCN) after radical cystectomy. **MATERIALS & METHODS:** This is a prospective study done between January 2007 and February 2013. Total 52 Patients who underwent radical cystectomy with SCN were enrolled in the study. SCN reconstructions were carried out using the technique published by Reddy et al. Contraindications for ONB in the present study were impaired renal function (serum creatinine > 2 mg/dL), chronic inflammatory bowel disease, history of previous bowel resection, tumor involvement at the bladder neck/prostatic urethra and patient reluctance to perform clean self-intermittent catheterization. Data were collected regarding demographic profile, body mass index, comorbidities, histopathology, pathological tumor stage, postoperative

complications, adjuvant therapy and relapse. **RESULTS:** Relapse on follow up was present in 6% of study population and adjuvant chemotherapy was given in 14%. Early and late complications occurred in 15.39 and 5.77% respectively. Number of patients voiding without assistance were 44 whereas day time continence was achieved by 46 patients. **CONCLUSIONS:** SCN results in satisfactory clinical outcomes in patients with radical cystectomy. Non refluxing uretero intestinal anastomosis decreases upper urinary tract morbidity. SCN involve lower abdomen only and can be completed under spinal anesthesia safely. Nerve supply of sigmoid colon is S2,3,4 which helps in better urine voiding co-ordination after SCN formation.

POD 31 – 03

Prognostic Stratification of Clear Renal Cell Carcinoma by Tumor Size : Is it the Time for Re-Staging T1 tumors

Baghel Ashutosh, Vivek P.O., Chally R., Azeez A.V.A., Chally P., Mohanan K.

Baby Memorial Hospital, Calicut

Introduction & Objective : Renal cell carcinoma (RCC) accounts for approximately 3% of adult malignancies and 90-95% of neoplasm arising from the kidney. The aim of our study was to re evaluate the optimal tumor size cut-off point that independently differentiates patient prognosis and to propose a restaging of the T1 tumors. **Materials & method:** Study conducted at Baby Memorial Hospital, Calicut, Kerala, from Jan 2000 to April 2014 and data collected in retrospective and prospective manner. Patients were grouped into T1a, T1b, T2a, T2b based on clinical classification and into tumor size < 3 cms, 3-7cms, $> 7-10$ cm and > 10 cm based on pathological staging. The cancer-specific survival probability was estimated according to the Kaplan-Meier method. **Results :** T1a Survival 39(97.5%) with 1(2.5%) Death, 95% had No Metastasis, Sinus invasion(0%). T1b Survival of 66(94%) death of 4(6%). Metastasis in 6(9%), Sinus invasion 14(20%). T2a Survival of 31(73.8%) and deaths 11(26.2%), metastasis in 8(19%), Sinus invasion in 19(45%). T2b Survival of 7(35%) and mortality 13(65%), Metastasis in 11(55%), Sinus invasion 11(55%). Group < 3 cms Survival of 100%, Sinus invasion, metastasis of 0%. Group 3-7 cms Survival 86(93.73%), 2 Deaths(2.27%), Metastasis in 6(7%), Sinus invasion in 13(15%), Group 7-10 cms Survival of 30(71.4%), 12 deaths (28.6%), Metastasis in 22(52%), Sinus invasion in 19(45.3). Group > 10 cms Survival of 9(45%), Death 11(55%), Metastasis 12(60%), Sinus invasion 12(60%). **Conclusion** Our study supports the existing 7 cm threshold as a prognostic cut off point and revealed Categorizing tumors into < 3 cms, $> 3-7$ cms, $> 7-10$ cms & > 10 cms is more statistically significant for survival prediction and it mandates supportive studies for a newer T1 staging.

POD 31 – 04

Quality control assessment of transurethral bladder tumor resection done by residents in an academic teaching setting.

Siddharth Kini, Tanwar HV, Ismail MA, Patwardhan SK

Seth GS Medical College and KEM Hospital, Mumbai

INTRODUCTION AND OBJECTIVES: Quality control assessment of transurethral bladder tumor resection (TURBT) done by residents in academic teaching setting. **METHODS:** We prospectively evaluated all TURBTs performed in a year at a tertiary teaching institute. All cases were performed by third year Registrars under supervision of consultants. Quality of TURBT assessed on following parameters like 1) completeness of the resection 2) deep muscle biopsy taken or not as confirmed on histopathology 3) residual tumour tissue in cases of reTURBT 4) intra operative and postoperative complications associated with the procedure. Intraoperative complications if any were recorded at the end of the procedure and case sheet was reviewed, for postoperative complications and need for blood transfusions. Patients followed up after discharge and histopathology reports were traced. **RESULTS:** A total of 44 consecutive TURBTs were performed by residents. Procedure was completed safely with complete resection in 39(88.63%) patients. Procedure abandoned in 3(6.8%) cases due to hematuria, only one of which need postoperative blood transfusion and in 2(4.5%) cases due to

small extraperitoneal perforation both of which required only prolonged catheter drainage. deep muscle biopsy not identified in histopathology in 2 (4.5%) cases. Total of 18 patients underwent reTURBT of which incomplete resection and understaging of bladder identified 8 (18.18%) patients CONCLUSIONS: TURBT is an important and a reasonably safe procedure when performed by urologists in training under direct attending supervision. Frequent Quality control assessment needed to avoid understaging of the bladder carcinoma as it has serious prognostic consequences for the patients.

POD 31 – 05

To evaluate post operative renal function and risk factors for loss of renal function in patients who had under gone radical cystectomy

Vasanth Rao Periketi, Satish Babu, Syama Sundara, Bhavani Shankar, Kasala Latheef, Anil Kumar, Tyagi.A.

SVIMS Tirupati

AIMS AND OBJECTIVES To evaluate post operative renal function and risk factors for loss of renal function in patients who had under gone radical cystectomy **MATERIAL AND METHODS** A retrospective single institutional study evaluated 45 patients, including 30 males and 15 female patients who underwent radical cystectomy at our institute SVIMS ,Tirupati ; from 2005-2014 median follow up was 36 months {ranging from 3-90 months}.in this cohort ileal conduit was used as sole form of urinary diversion.post operative changes in renal function were reviewed and estimated creatinine based e GFR was calculated, variables analysed were age,sex,hypertension,diabetes,pre operative renal function, post operative occurrence of acute pyelonephritis, presence of chemotherapy . **RESULTS** The mean e GFR was 74.2{22.7-143.7}ml/min/1.73 m² before surgery and 58.6{8.2-140.9} ml/min/1.73 m² after surgery at last follow up.5 year renal deterioration free interval was 63.8%. Multivariate analysis showed that post operative occurrence of acute pyelonephritis {p value - 0.0003*} and presence of chemotherapy { p value <0.0001*}were significant adverse factors **CONCLUSION** 13 out of 45 {28.8%} patients demonstrated reduction in renal function during the follow up period.post operative episodes of acute pyelonephritis and presence of chemotherapy were found to be significant risk factors.

POD 31 – 06

Evaluation with diffusion weighted magnetic resonance imaging in staging and grading of urinary bladder cancer

Griffin M, Ramkumar J, Karunamoorthy R, Ilamparthy C, Selvaraj V, Thiyagarajan K

Madras Medical College, Chennai

Introduction and Objective : Primary Objective To predict the pathological stage and grade of bladder cancer preoperatively by using Diffusion weighted MR Imaging Secondary objective: To study the correlation of DW MRI findings with clinical, radiological and pathological findings. **Materials and Methods:** All newly diagnosed cases of Carcinoma bladder who undergo TURBT/ Cystectomy in Dept of Urology were evaluated by clinical examination, renal function tests, urine cytology, imaging studies in the form of USG/CECT KUB. Diffusion weighted Magnetic Resonance Imaging of KUB region were taken at the time of hospital admission. Patients then underwent Transurethral Resection of Bladder Tumour/ Cystectomy. These results were correlated with Clinical, Imaging and the pathological finding.Chi-Square test and correlation coefficients used for study. P value of less than 0.05 was statistically significant. **Results:** On the DW images, all tumours in the 46 patients were shown as high signal intensity (SI) in relation to the surrounding structures. There were no false-positive cases. The positive predictive values of DW imaging were 100% in terms of correctly detecting the carcinomas. **Conclusions :** The overall accuracies for diagnosing tumor T stage and N stage with DW MRI images p value was < 0.001and was statistically significant. DW MRI provides information on perfusion and diffusion simultaneously in any organ, it can be used to differentiate normal and abnormal structures of tissues better, and it might help in the characterization of various abnormalities.

Podium Session 32: URO ONCOLOGY 5

POD 32 – 01

Age stratified comparative analysis of perioperative, functional and oncological outcomes in patients after robot assisted radical prostatectomy - a propensity score matched study

Kumar Anup, Samavedi S, Sivaraman A, Ebra G, Palmer K, Patel V

Global Robotic Institute, Florida

Introduction & Objectives Our goal was to evaluate the perioperative,functional and intermediate term oncological outcomes of robotic assisted radical prostatectomy in patients above 70 years. **Methods** The study population (N=3241) consisted of consecutive patients who underwent RARP for localized prostate cancer by a single surgeon (VP) from January 2008 through February 2012. A query of our Institutional Review Board approved registry identified 400 men 70 years of age and over who were computer-matched in a 1:1 ratio to younger patients using an optimal matching algorithm. Perioperative and postoperative functional and oncologic outcomes for the two groups were compared. **Results** Full nerve sparing as well as the ease of nerve sparing were similar in 2 groups. Intra-operative complications were comparable.. Postoperative complication occurrence rates were similar. At mean follow up of 34.1 months and 37.2 months respectively in younger and older patients, the continence rate was comparable in 2 groups(91.3 % and 87.3%).Average time to continence was similar and for potency was 7 months for younger patients vs. 5.9 months for older patients. A greater proportion of younger patients became potent than elderly (52.3% vs 33.5%,p<0.001).The BCR rate was comparable in 2 groups(7.8% vs 8.3% ;p=0.79). The mean time to BCR was also comparable in 2 groups (16 months vs 22.6 months ;p=0.07). **Conclusions** In appropriately selected patients RARP is a reasonable option in patients > 70 years and provides comparable perioperative,functional and intermediate term oncologic outcomes as compared to younger patients.

POD 32 – 02

Multivariate analysis of preoperative hydronephrosis as a prognostic indicator in radical cystectomy patients - a single centre experience

Shirish Mishra, Shivalingaiah M; Ratkal CS

Institute of Nephro Urology Bangalore

Objective - We determined the prognostic significance of preoperative hydronephrosis in patients with transitional cell carcinoma (TCC) of the bladder undergoing radical cystectomy. **Materials and Methods-** We performed a retrospective review of all patients undergoing radical cystectomy at our institution from 2007 to 2013. Exclusion criteria included diagnosis other than TCC, upper tract TCC, incomplete medical records, or obstructing stones. Hydronephrosis was confirmed by radiographic imaging. Survival was determined by date of death or last clinic visit. **Results:** Sixty five patients fulfilled the inclusion criteria; 43 (66%) had normal upper tracts, 18 (27%) had unilateral hydronephrosis, and 5 (7%) had bilateral hydronephrosis. Median overall survival of the study population was calculated using Kaplan meier method. There was a statistically significant difference in median survival between those without hydronephrosis , and those with unilateral or bilateral hydronephrosis. Preoperative hydronephrosis was significantly associated with higher pT stage as well as postoperative positive margins , but not with positive lymph nodes . Preoperative hydronephrosis had no significant effect on survival in patients with pT0-3a, N0, surgical margin negative tumors, but was significantly correlated with decreased survival in patients with pT3b or greater, or N+, or surgical margin positive tumors . On multivariate analysis, preoperative hydronephrosis was a significant predictor of decreased survival. **Conclusions:** Preoperative hydronephrosis is an important and independent prognostic variable in patients with TCC of the bladder treated with radical cystectomy.

POD 32 – 03**Effectiveness of endoscopic injection of 2% lignocaine into bladder wall to control obturator jerk during transurethral resection of bladder tumour**

Anoop Krishnan K K, manikandan M, Shanmughadas K V, Rajeevan A T, Madhavan N, Dineshan K M, Venugopalan A V, Felix Cardoza

Govt Medical College Kozhikode

Introduction-Bladder cancer is the second most common cancer of the genitourinary tract. whether it is superficial or muscle invasive, urethrocytostomy and transurethral resection of bladder tumour (TURBT) would be diagnostic as well as therapeutic. But TURBT is not difficultly free perioperatively. One of the most important difficulties is obturator jerk that may bring disaster during the procedure. To avoid the obturator jerk reflex, urologist often cannot fully resect the tumour on inferolateral bladder wall. Endoscopic injections of local anaesthetic (2% lignocaine) to bladder wall is very easy and permissible procedure under direct vision for regional conduction block to prevent obturator jerk. Onset of action is approx 4 minutes and lasts upto 40 minutes. Endoscopic injection of 2% lignocaine into bladder wall at base of tumour 5mm away from margin with a specialised needle is very quick and permissible procedure under direct vision to prevent obturator jerk. **Objective-**To observe the efficacy of endoscopic injection of 2% lignocaine into the bladder wall at the base of tumour to control obturator jerk. **Materials and methods -**This prospective study was performed in department of urology, Govt medical college kozhikode Kerala, during the period from January 2014 to August 2014. Total 50 patients were grouped into two on alternate basis, 25 patients in group A, conducted with endoscopic injection of 2% lignocaine and another 25 patients were in group B, conducted with nerve block to control obturator jerk. **Peroperative findings** of both groups during transurethral resection are evaluated. **Results-**In group A 25 patients were conducted with endoscopic injection of 2% lignocaine to control obturator jerk 22 patients developed complete elimination and 3 patients developed partial elimination of obturator jerk. In group B patients, TURBT were conducted with obturator nerve block. In group A complete resection possible in 22 patients without any obturator jerk and in 3 patients complete resection possible with mild form of obturator jerk after endoscopic injection of 2% lignocaine. In group B complete elimination of obturator jerk were not possible. **Statistical analysis** was done and result is significant ($P < 0.05$). **Conclusions-**It is concluded that endoscopic injection of 2% lignocaine into the bladder wall is more effective in the management of the patient with bladder tumour who develops obturator jerk during transurethral resection of bladder tumour.

POD 32 – 04**Scope of diffusion weighted magnetic resonance imaging in renal masses**

Sivasankar M.

Rajiv Gandhi Government General Hospital, Chennai

Introduction and objective: Renal cell carcinoma (RCC) is a common urological cancer. Despite computed tomography (CT) and Magnetic resonance imaging (MRI), studies have shown that 16% to 33% of nephrectomies are performed on benign lesions. Diffusion weighted MRI can be used to differentiate benign and malignant tissue. The malignant lesions have low apparent diffusion coefficient (ADC) values and benign lesions have high ADC values. Our aim is to predict the histopathologic nature of renal masses by using diffusion weighted MRI. **Methods:** We selected forty newly diagnosed cases of renal masses. Clinical examination, baseline blood investigations, skiagram chest, ultrasound abdomen with doppler or contrast enhanced CT kidney, ureter and bladder were done. Three different breath hold diffusion weighted image acquisition was performed in the transverse plane with tridirectional gradient and three sets of b values 0, 400 and 800 seconds (sec) per square millimetre (sq. mm) and ADC values calculated using pixel based ADC mapping. Patient underwent simple or radical nephrectomy and histopathologic diagnosis confirmed. **Results:** The cut-off ADC values for diagnosis of all malignant versus benign lesions was less than 1.74×10^{-3} power minus three sq. mm per sec. The ADC value for diagnosing clear cell carcinoma would be 1.32×10^{-3}

power minus three sq. mm per sec. Mean ADC for diagnosing high grade RCC is 1.23×10^{-3} power minus three sq. mm per sec. **Conclusion:** Diffusion weighted MRI is useful in differentiating cystic benign from cystic RCC, histologic subtyping of RCC, tumour grading in clear cell RCC.

POD 32 – 05**Human serum based Metabolomics approach to determine Low- and High-Grade Bladder Cancer**

Satya Narayan Sankhwar, Gupta Saurabh, Sankhwar Pushplata, Bansal Navneeta, Gupta Ashish, Mandhani Anil, Yadav Manoj

King George Medical University, Lucknow

INTRODUCTION AND OBJECTIVE To address the shortcomings of urine cytology and cystoscopy for probing and grading urinary bladder cancer (BC), we applied 1H nuclear magnetic resonance (NMR) spectroscopy as a surrogate method for the identification of BC. **MATERIAL AND METHODS:** This study includes 99 serum samples comprising low-grade (LG; n = 36) and high-grade (HG; n = 31) BC as well as healthy controls (HC; n = 32). 1H NMR-derived serum data were analyzed using orthogonal partial least-squares discriminant analysis (OPLS-DA). OPLS-DA-derived model validity was confirmed using an internal and external cross-validation. Internal validation was performed using the initial samples (n = 99) data set. External validation was performed on a new batch of suspected BC patients (n = 106) through a double-blind study. Receiver operating characteristic (ROC) curve analysis was also performed. **RESULTS:** OPLS-DA-derived serum metabolomics (six biomarkers, ROC; 0.99) were able to discriminate 95% of BC cases with 96% sensitivity and 94% specificity when compared to HC. Likewise (three biomarkers, ROC; 0.99), 98% of cases of LG were able to differentiate from HG with 97% sensitivity and 99% specificity. External validation reveals comparable results to the internal validation. **CONCLUSIONS:** 1H NMR-based serum metabolic screening appears to be a promising and less invasive approach for probing and grading BC in contrast to the highly invasive and painful cystoscopic approach for BC detection.

POD 32 – 06**Study of outcomes of ileal orthotopic neobladder reconstruction after radical cystectomy :our institution experience**

Prakash Gaurav, Singh Vishwajeet, Sankhwar Satyanaryan, Goel Apul, Sinha Rahul Janak

KGMC Lucknow

Objective and Introduction: Radical cystectomy followed by urinary diversion is regarded as the 'gold standard' treatment for carcinoma invading the bladder muscle without detectable hematogenous or lymphogenous metastases. Orthotopic substitution of the bladder following cystectomy is currently well established. This procedure, which requires a bowel segment, avoids an abdominal stoma and may offer an improved quality of life for patients undergoing radical cystectomy for bladder cancer. The purpose of the study was to investigate whether ileal orthotopic bladder substitution is an ideal procedure with less complication, providing adequate pouch capacity, good continence and voluntary control of voiding without residual urine, and preservation of renal function. **Material & Methods :** Between January 2007 and December 2013, a total of 76 patients underwent radical cystectomy and ileal neo bladder formation. The final analysis included 56 (73%) patients who had follow-up data of at least 18 months. Data were collected regarding demographic profile, body mass index (BMI), comorbidities, histopathology of the cystoprostatectomy specimen (with lymph nodes; pathological tumour stage (according to 2009 TNM staging system), postoperative early and late complications, continence status. **Results:** The final analysis included 56 (73%) patients who had follow-up data of at least 18 months. Pathological tumour stages were assigned to three prognostic groups: organ-confined ($\leq pT2$, pN0), non-organ-confined (pT3–pT4a, pN0) and lymph node-positive (pN+). 46 patients had organ confined tumor 3 had non organ confined while 7 had lymph node positive tumor. Early post op complication were found in 13 patients (22 %). while late complication were found in 3 patients. among 56 patients who underwent ileal neobladder formation 48 (85%)

were voiding without assistance, while 6 were voiding with assistance. 2 were using CIC only. Total 47 patients had day time continence while 33 patients had night time continence. Conclusions : The results of the present study is also showing that Ileal neobladder provides satisfactory outcome and should be the preferred type of urinary diversion.

Podium Session 33: STRICTURE URETHRA 1

POD 33 – 01

Impact of visual internal urethrotomy on sexual function in patients with urethral stricture

Prashanth Adiga K, Manikandan M, Shanmughadas K.V, Madhavan N, Rajeevan A T, Dineshan K M, Venugopal A V, Felix Cardoza

Medical college Kozhikode

AIM: Visual internal urethrotomy (VIU) is an option for the management of urethral stricture. However, little is known regarding sexual function after surgery. PATIENTS AND METHODS: Forty patients who underwent VIU were evaluated by using the Male Sexual Health Questionnaire. Three sexual functional domains of erection (EFD), satisfaction (SAD), and ejaculation (EjFD) were assessed at baseline, 3 months, 6 months. We assessed clinical factors (age, etiology) and radiologic factors (stricture site, stricture length, frequency of recurrence, and duration until first recurrence). RESULTS: A total of 40 men with mean age of 57.1±13.07 years completed this study. In univariate analysis, there were significant losses of EFD scores at postoperative 3 months for all age groups. And these scores were regained after postoperative 6 months. There was no statistically significant difference in SAD. Age, length of stricture, frequency of recurrence, and duration until first recurrence were significant differences in EjFD and . In 40 to 49 and 50 to 59 age groups, VIU improves EjFD. Multiple linear regression analysis revealed that age and stricture length were independent factors of VIU on EjFD. CONCLUSIONS: VIU can improve ejaculatory function in younger age group (40-59 years). Age and stricture length are independent predictive factors of VIU on ejaculatory function.

POD 33 – 02

Dorsal versus ventral onlay graft for long segment bulbar urethral stricture, a prospective randomized study

Gaurav Kumar, Pawan Vasudeva, Anup Kumar, Biswajit Nanda, Harbinder Singh, Sanjeev Jha

VMMC and Safdarjang Hospital

Male urethral stricture disease, one of the oldest problems known to urology, has incidence rate as high as 0.6% in some susceptible populations. [1] The causes of bulbar urethra stricture are commonly idiopathic, trauma, instrumentation and infection. [2,3] A variety of techniques to reconstruct anterior urethral strictures are presently available e.g; flap, free graft, excision of the stricture and end-to-end anastomosis etc. Although excision of the stricture and primary end-to-end anastomosis is the gold standard, durable and has 90% to 95% success rate, it is best reserved for bulbar urethral strictures ≤2 cm long. [4] For more complex strictures, tissue-transfer techniques are used with overall success rate of approximately 90%. [3,5] For the management of bulbar urethral stricture >2 cm in size, the buccal mucosal graft substitution urethroplasty is a standard procedure with durable results. [3, 6] Although few prospective studies were reported in literature regarding management of bulbar urethral stricture, none compared ventral versus dorsal onlay buccal mucosal graft urethroplasty (BMGU). [7-8] So, we planned to prospectively compare safety and efficacy of ventral versus dorsal onlay BMGU in patients with long segment bulbar urethral strictures. This two arm study comparing ventral versus dorsal onlay BMGU is the first prospective randomized study in our knowledge after thorough Medline/Pubmed search. We conclude that both dorsal and ventral onlay buccal mucosal graft urethroplasty have comparable efficacy and low complication rates for treatment of long segment incomplete bulbar urethral strictures. To choose between the two techniques, it should be surgeon's choice

POD 33 – 03

A prospective analysis of outcome of treatment modalities in stricture urethra in a single hospital

Mohd Younis Baht, Malik Sajad A, Rama Raju K, Prasad Raju K, Chatterjee S, Swamy S

Care Hospital Hyderabad

Background: Treatment of anterior urethral stricture includes: dilatation, visual internal urethrotomy, excision and end to end anastomosis, graft urethroplasty and flap urethroplasty. we analysed the outcome of all these treatment modalities in the stricture patients who presented to our hospital. Objective: To evaluate and analyze the outcome in patients who underwent treatment for stricture urethra in our hospital. Patients and methods: we evaluated 110 patients with stricture urethra from 2007 – 2010. Each patient was evaluated with relevant investigations. Operative procedures were undertaken. Mean follow up of patients was 60 months. Outcome was assessed by comparing preoperative and postoperatively uroflowmetry and symptoms at each visit. RESULTS: Average age of patients was 40 years. Patients with stricture length less than 2.5 cms underwent dilatation or internal urethrotomy as primary procedure while urethroplasty was done in patients with stricture length more than 2.5 cms. Urethral dilatation was done as primary procedure in 32 patients (29%). Visual internal urethrotomy was done in 37 patients (33%). Urethroplasty was done in 41 patients as primary procedure (37%). Success rate of dilatation and visual internal urethrotomy was 40% and 50% respectively. Urethroplasty was successful in 94 % of patients. 6% patients required perineal urethrostomy. 6% of patients developed sepsis postoperatively, 3 patients developed ejaculatory dysfunction post urethroplasty. Conclusion: We conclude that the treatment of urethral strictures should be individualized; taking into account the location, length and extent of spongiofibrosis. Post dilatation and internal urethrotomy, urethroplasty becomes difficult because of severe spongiofibrosis

POD 33 – 04

Prospective analysis of role of sonourethrography in the evaluation of anterior urethral stricture and its correlation with retrograde urethrography

Srinivas Kalabhavi, Manohar, Sumit, Shivalingaiah, Ramalingaiah, C S Ratkal

Institute of Nephro-Urology, Bangalore

Objectives of the study: To assess the role of sonourethrography in the evaluation of anterior urethral stricture and its correlation with retrograde urethrography. Materials and methods: Patients admitted with anterior urethral stricture disease in the department of urology at our institute (institute of nephrourology-Bangalore) from August 2012 to July 2014 were evaluated prospectively with sonourethrogram and RGU. 30 cases of anterior stricture urethra diagnosed based on clinical examination were included in the study. All the patients underwent sonourethrogram and RGU before reconstructive urethroplasty. The findings correlated intraoperatively with measured stricture length and dimensions. Results: In all, 12 patients underwent excision and anastomotic urethroplasty, 16 patients underwent buccal mucosal onlay graft urethroplasty and 1 patient underwent fasciocutaneous flap procedure and 1 patient had combination repair i.e. BMGU urethroplasty plus fasciocutaneous flap procedure. Preoperative surgical procedure planned changed from anastomotic urethroplasty to BMGU urethroplasty in 10 patients out of 16 patients (62.5%) based on intraoperative measurement of stricture length and dimensions using measuring tape and assessing spongiofibrosis by palpating the stricture scar region. Sonourethrogram measurements and spongiofibrosis assessment were closely related to intraop assessment compared to RGU findings preoperatively. These findings changed surgical procedure planned preoperatively in 10 out of 16 patients to BMGU urethroplasty. Conclusions: Sonourethrography of the anterior urethra directly influenced reconstructive operative approach in 62.5% cases. It is simple, reliable procedure that adds valuable clinical insight and objective radiographic data to help select the optimal anterior urethral reconstructive approach.

POD 33 – 05**A comparative study of outcome of buccal mucosa graft and lingual mucosa graft augmentation in management of urethral strictures****Chauhan Sharad, Tomar V, Yadav S S, Priyadarshi S, Vyas N, Aggrawal N**

SMS Hospital Jaipur

Objective: To compare the outcome of buccal and lingual mucosa graft augmentation urethroplasty in management of anterior urethral stricture. **Methods:** From August 2012 to March 2014, 102 patients underwent single stage augmentation urethroplasty. They were divided into two groups to receive either buccal(Group1) or lingual mucosal graft(Group2). Patients were prospectively followed up for immediate and long term complications and outcome using questionnaire, uroflowmetry and urethrography. Any patient who required instrumentation in postoperative period or uroflowmetry showed Qmax less than 10 were considered failures. **Results:** One hundred two patients, aged 18-72 years, underwent one-stage dorsal onlay urethroplasty with buccal(n=52) or lingual mucosa graft(n=50) at our centre. Mean age, stricture length and operative time were comparable in two groups. Stricture length ranged from 3.2 cm to 9.6 cm. Perioperative pain scores, restriction in mouth opening, perioral numbness were more common in group1 and speech difficulty was more common in group 2, although there was no long term morbidity in group 2. Out of 102, twenty six patients were categorised as failures (group 1-16, group 2-10). Among them 16 patients presented with voiding difficulty in first 3 months, 6 patients in next 3 months and 4 patients in next 6 months. **Conclusion:** Lingual mucosa graft urethroplasty provides equivalent or better outcome than those of buccal mucosal graft urethroplasty. Even immediate and delayed morbidity and complications are fewer with lingual mucosal graft as compared with buccal mucosal graft.

POD 33 – 06**Versatility of Buccal Mucosal Graft Urethroplasty****H S Bhatyal, Samit Chaturvedi**

BLK Super Speciality Hospital, N Delhi

Introduction: Urethral stricture management is a challenge. Buccal mucosal urethroplasty is a useful tool in urological armamentarium. It is most popular and versatile procedure for management of anterior urethral strictures. The graft can be used as ventral/dorsal, onlay/inlay or combination as per situation. **Material & Methods:** From 2003 to Jun 2014 we analysed 320 cases of BMG urethroplasty for anterior urethral strictures. Mean patient age was 35 years. Aetiology was inflammatory in 106, trauma 34, instrumentation 24, catheter induced 107, post hypospadias repair 28 and unknown aetiology in 20 cases. Multiple OIU and dilatations had been done in 186 and 97 had previously failed urethroplasties. Harvest site was unilateral in 217 and bilateral in 103 cases. Mean graft length was 5.5 cms. Graft application: Dorsal onlay 96, ventral onlay 20, dorsal onlay and ventral inlay 44, dorsal inlay (Asopa) 50, staged urethroplasty 45, augmentation 20, complex urethroplasty 35, stricturoplasty (Mundy) 10. All had silicon urethral catheter, 289 had additional spc for 3 weeks and 108 had perineal drain for 2-3 days. Urethral catheter and spc were removed after 21 days after pericatheter RGU to rule out leak. Follow up was with uroflowmetry, urine culture and RGU/MCU at 3/6/12 months. **Results:** 289 cases were successful with flow rate of 16ml/sec or more, 36 cases were failures requiring OIU in 18, redo urethroplasty in 9 and periodic dilatation in 9 cases. **Conclusion:** About 92 % of anterior urethral strictures can be managed by BMG urethroplasty which is a versatile procedure with success rate of about 90%. Type of procedure depends upon the situation and surgeon's experience.

Podium Session 34: STRICTURE URETHRA 2**POD 34 – 01****Longterm outcome of dorsal BMG substitution urethroplasty for anterior urethral stricture****S. Srinivas, Rahul. D, Vidyasagar.S, Ramchandraiah, Ramreddy.C, VLN Murthy Pisapati**

Nizams Institute of Medical Sciences, Hyderabad

To assess the longterm outcome of dorsal buccal mucosal graft substitution urethroplasty for anterior stricture urethra from single institution. From 2007 to 2014 total 119 patients underwent dorsal buccal mucosal graft substitution urethroplasty as described by either barbagli or asopa. 82 patients are on followup. mean followup is 26 months (6-80 months). 32 patients underwent urethroplasty by asopa technique and 50 patients by barbagli technique. Outcomes, success rate and complications were assessed. Patients who underwent urethroplasty by barbagli technique had mean qmax 20.2 and mean postvoid residue 25.6cc whereas patients who underwent urethroplasty by asopa technique had mean qmax 19.4 mean postvoid residue 28cc. Though urethroplasty by asopa technique preserves blood supply of urethra, there is no statistically significant difference in final outcome using either technique. Dorsal BMG substitution urethroplasty is applicable to all anterior urethral strictures with good efficacy and low complication rates.

POD 34 – 02**Single stage repair of pan-urethral stricture with transperineal dorsal onlay substitution – complications and results****Kore R N**

Warana Institute of Uro-Surgery

Introduction and Objective : Pan-urethral stricture (PAN-US) – a challenging entity- needs careful evaluation and appropriate selection of treatment option. We evaluate complications and results of treatment of PAN-US with transperineal dorsal onlay substitution using buccal mucosal graft or a skin flap. **Methods:** This cohort study was analysis of 21 men with PAN-US. Age range was 21 to 64 (mean 48). There were 5 (24%) BXO, 9 (43%) iatrogenic, 4 (19%) infective and 3 (14%) idiopathic. All the cases were done with penile invagination and dorsal onlay in entire length except at the distal penile urethra where dorsal inlay was done through the meatus. Substitution material was buccal mucosa graft and prepuce/penile skin flap. Preoperative assessment was done with AUA symptom score, uroflowmetry, ultrasonography and urethrogram. Follow up included all these parameters except urethrogram and was done for 6 to 55 months (mean 27). **Results:** Immediate complications were penile edema in 4 (19%), urinary sepsis in 1(4%) and fistula in 1(4%). Late complication was re-stenosis requiring intervention in 3 (14%). Site of stenosis was meatal 2(9%), anastomotic 3 (14%) and intermediate 1 (4%). AUA symptom score, peak flow rate and post void residue improved from 30 to 5, 4 to 21 ml/s and 230 to 20 ml respectively. The quality of life improved six fold. **Conclusions:** The success of entire length substitution urethroplasty with single material or combination in complex PAN-US in short and medium term is gratifying. Complications are known but manageable. However long term outcome needs structured assessment.

POD 34 – 03**A comparative study between single stage bmg augmentation tip urethroplasty and 2-stage johansson bmg urethroplasty in penile urethral strictures****Mitra Nilanjan, Kamal Mir Reza, Mukhejee Subhabrata, Sinha Rajan Kumar, Sharma Pramod Kumar, Mondal Soumendranath, Karmakar Dilip**

Calcutta National Medical College, Kolkata

Introduction and Objectives: Buccal mucosa graft (BMG) urethroplasty is known technique for long segment anterior urethral strictures. This study is done to compare results of one-stage dorsal onlay BMG tubularized incised plate (TIP) urethroplasty (Group1) versus 2-stage Johansson BMG augmentation urethroplasty (Group2) in nontraumatic long segment penile urethral strictures. **Methods:** Retrospective audit of 38 patients who underwent single stage dorsal onlay BMG TIP urethroplasty or 2-staged Johansson BMG urethroplasty for nontraumatic penile urethral long segment strictures at CNMCH, Kolkata between August 2011 and July 2013 was undertaken. Pre-operative assessments included clinical data, urine analysis, uroflowmetry, retrograde and voiding cystogram and cystourethroscopy. Follow-up done with history of symptoms, uroflowmetry and ASU/MCU at 3,6,12 and 18 months.

Further instrumentation to assist voiding was considered as failure. Results: Predominant etiologies were Lichen sclerosus-et-atrophicus (46%) and idiopathic (38%). Mean stricture length was 4.5cm (2–7cm). 18 patients were in Group 1 and 20 in Group 2. Mean operative time and postoperative hospital stay were comparable in both groups. Stricture recurrence noted in 2 patients (11%) in Group1 compared to 2 patients (10%) in Group2. 2 patients in staged group compared to no patient in single stage developed urinary fistula. Two patients in each group developed wound infection. No patient developed diverticulum, sacculation or protrusion of graft at external meatus. Qmax improval was 18.2ml/sec in Group1 and 19.8 ml/sec in Group 2 (p>0.05). Conclusions: Single stage BMG urethroplasty is equally good and safe procedure as 2-stage BMG urethroplasty in selected cases.

POD 34 – 04

Corethrough OIU with transurethral resection of fibrotic scar: an alternate endoscopic management for posterior urethral distraction defects ?

Jeeban Jyoti Mishra, Mahapatra BK, Choudhuri S, Swain S., Mohanty PK., Hota D

SCB Medical College, Cuttack

Aim and objectives To assess the efficacy and outcome of primary corethrough optical internal urethrotomy(OIU) with transurethral resection(TUR) of fibrotic scar in patients with posterior urethral distraction defects(PUDD). **Materials and Method** A prospective study conducted from March 2011 to August 2014 with total nineteen numbers of patients with PUDD of less than 2cm length estimated by on table bougiogram underwent core through OIU with TUR of fibrotic scar using standard TUR loop till punctate hemorrhages are seen. Trial without Catheter given at 3 week and follow up was carried out at 3 months interval up to one and half years with uroflowmetry, retrograde uethrogram and cystopanendoscopy when ever indicated. All patients were advised to do regular self dilatation. Results Age of patients ranged from between 19-55 years(Mean-) Out of nineteen cases, eleven patients are voiding with good stream at the end of one and half year follow up without requiring any intervention .Eight patients could not void well at 3 month follow-up and required intervention. Out of 8 failed cases three patients required OIU and 5 patients subjected for excision and perineal end to end anastomotic urethroplasty. **Conclusion** Transurethral resection of fibrotic scar with corethrough OIU could be an useful alternative endoscopic procedure can be tried in patients with posterior urethral distraction defects of less than 2cm failling which standard open surgical correction can be done. However, further studies with more number of patients with longer follow up are required to establish the efficacy of this novel innovative procedure.

POD 34 – 05

BMG Urethroplasty for long anterior urethral strictures – Is it Gold Standard?

Arun Karthik P, Tejus Chiranjeevi, Ravi Kumar BR, Dhayanand GS, Girish TD, Amruthraj G Gowda, Madappa KM

JSS Medical College & Hospital

Introduction Urethral reconstruction remains a challenge in modern surgical practice. Anterior urethral strictures that are not amenable to end-end anastomosis require substitution urethroplasty. Buccal mucosa is widely accepted as a graft material for anterior urethroplasty. **Objective** To assess the success of BMG Urethroplasty in long segment anterior urethral stricture extending from external meatus to bulbar urethra. **Materials & Methods** We studied 56 patients with long segment urethral stricture who underwent BMG Urethroplasty from Jan 2011 to February 2014. Patients were followed with uroflowmetry, retrogradeurethrogram(RGU) and AUA symptom scores. Successful outcome was defined as normal voiding with a maximum one attempt of VIU after catheter removal. Patients were further followed-up with uroflowmetry at 3 months interval and RGU every 6 months interval. Results The patient were in age range of 14 to 64 years. The cause of stricture was in 32 patients and NLS in 24 patients. The mean stricture length was 8.9 cm (range 5.1 to 12.7cm) and mean follow up for 18 months (range 6 – 36 months).Seven patients developed restructure and five patients voided normally after single attempt of VIU. Two patients required re do urethroplasty during followup and were considered failure. **Conclusion** BMG Urethroplasty in long segment anterior

urethral stricture provides excellent results and BMG appears to be most versatile urethral substitute.

POD 34 – 06

Urethroplasty for post-traumatic Urethral Strictures in a pediatric patients : our experience

Chaudhari R, Sharma A, Shaikh I, Desai R, Andankar M, Pathak H

TN Medical college & BYL Nair Ch Hospital Mumbai

Objectives- To evaluate the safety and efficacy of urethroplasty for posttraumatic urethral strictures using perineal approach in children. Urethroplasty by the perineal approach is considered the best treatment for bulbar and membranous urethral strictures in adults. **Methods-** We retrospectively reviewed our urethroplasty database to identify patients who had undergone urethroplasty using the perineal approach surgery in pediatric patients at age less than 14 years. **Results-** A total of 14 patients who had undergone urethroplasty by the perineal approach were identified. 10 had membranous and 4 bulbar urethral strictures. The membranous strictures were all secondary to pelvic trauma. bulbar strictures were secondary to blunt perineal trauma. Of 10 patients, 7 patients of membranous strictures(70%) were associated with pelvic fractures. Anastomotic urethroplasty was used in 10 (71.4%) patients and buccal mucosa urethroplasty in 4 patients(38.6%). The mean follow-up was 48 months (range 12 to 76). Surgery was primarily successful in 85.7% of the patients. Failed repair in 2 patients successfully managed with augmented anastomotic urethroplasty. All treatment failure were at the anastomosis and were within the first year. Mean maximal urinary flow rate is postoperatively 26.4ml/s. No significant complications occurred. All boys are continent. There was no chordee or urethral diverticula or erectile dysfunction during follow up. **Conclusions-** In pediatric patients, as in adults, bulbar and membranous strictures can be treated successfully with urethroplasty using the perineal approach. Longer follow-up is needed to confirm that these good results are maintained as these patients cross into adulthood, especially as these repair were done before puberty.

Video Session - I

VID 01 – 01

Adrenal tumour with IVC Thrombus - Two patients experience

Shelke UR, Patwardhan SK, Ismail MA, Tanwar H

Seth GS Medical College & KEM Hospital, Mumbai

INTRODUCTION & OBJECTIVES Adreno-cortical carcinoma is a rare malignancy, with bimodal age distribution. They present with symptoms related to local or systemic burden, and due to hypersecretion of hormones. Currently surgical resection remains the cornerstone of treatment. **METHODS** Two patients presented with complaints of flank pain with recently diagnosed hypertension. Patients were evaluated with detail history, physical examination, blood investigation and imaging. **RESULT** First patient was 52 year old female and other was 14 year old boy. Both had large palpable adrenal mass. Female patient's adrenal mass was associated with retro-hepatic IVC thrombus, whereas that of boy was associated with IVC thrombus and imaging was suggestive of liver infiltration. Female was having deranged dexa suppression test and raised serum aldosterone, whereas in male patient, aldosterone levels were raised. Pre-operative hypertension was managed with three anti-hypertensive drugs in both patients. Adrenalectomy with IVC thrombectomy was done in both patients. Female patient in addition required excision of caudate lobe of liver, where as adrenal tumour of male child was free from liver. Both patients had uneventful course post-operatively. **CONCLUSION** Surgical excision is the only option for curative management of adreno-cortical carcinoma and should be performed with cardio-vascular & thoracic surgeons and gastro-intestinal surgeons on standby.

VID 01 – 02

Technique and outcome of dorsal buccal mucosal graft urethroplasty for female urethral stricture disease

Ratkal V, Chawla A, Mishra D

Kasturba Medical College, Manipal

Female Urology

INTRODUCTION & OBJECTIVES- Females with urethral stricture are commonly treated with urethral dilatation. We present our experience in the outcome of dorsal buccal mucosal graft (BMG) urethroplasty in 18 females with urethral stricture. We wish to present a video of the technique of Dorsal BMG urethroplasty in females. **STUDY METHODS-** A total of 18 patients underwent BMG urethroplasty for stricture urethra from Jan 2008 to March 2014. All patients had persistent voiding symptoms for more than 1 year despite multiple urethral dilatation (n=4-33). Preoperative evaluation including voiding cystourethrogram, uroflowmetry (Qmax <6-8 ml/sec) and urethroscopy using 6/7.5 Fr ureteroscope were done to identify the strictured urethral segment. **RESULTS-** Buccal mucosal graft urethroplasty was done in all the patients with the graft being harvested from the cheeks. Postoperative evaluation was done with voiding cystourethrogram at the time of catheter removal during the 4th postoperative week. Mean peak urinary flow rate increased from 6.8 ml/sec to 30.2ml/sec with normal flow curve stabilized at 3 months to a mean of 24.4 ml/sec. Patients were followed at 3,6,9 and 12 months in the first year and then 6 monthly thereafter with uroflowmetry and ultrasonogram. Mean follow up period is around 18 months. None of the patient developed urinary incontinence, required urethral dilatation or clean intermittent catheterisation during follow up.

VID 01 – 03

Complicated Vesicovaginal Fistula - A Challenge

Harshawardhan Tanwar, Sudarshan Data, Abhishek Singh, Mohd Ismail, Sujata Patwardhan

KEM Hospital and Seth GS Medical College, Mumbai
Female Urology

INTRODUCTION AND OBJECTIVES: Vesicovaginal fistula (VVF), commonly caused by prolonged obstructed labor, is one of the worst complications of childbirth and poor obstetric care in the developing world. This unpleasant complication leaves affected women with continuously leaking urine, excoriation of vulvas and vaginas, often rendering them social outcasts. Here we present a video of a complicated VVF repair. And how augmentation cystoplasty is an integral part of the operation. A 62 year old lady, a case of Vesicovaginal fistula post Abdominal hysterectomy 2 years back. Patient was previously operated three times for vesicovaginal fistula repair transabdominally. **b)METHODS:** Patient was evaluated preoperatively by history, physical examination, serum creatinine, ultrasonography abdomen and intravenous urography (IVU). Cystoscopy was performed to determine the site, size and numbers of the fistulas along with the assessment of the mucosa around the fistulous opening. Vaginal speculum examination was done to assess the vaginal capacity and vaginal mucosal integrity. Transabdominal repair with augmentation cystoplasty with left ureteric reimplantation was done. **c)RESULTS:** Patient's postoperative course was uneventful. There was no wound infection. Catheter was removed after 6 weeks. Patient voided per-urethrally with good stream. SPC was removed after a week. Left DJ stent was removed after 6 weeks. There was no evidence of leak post operatively and patient was taught CSIC after PUC removal. **d)CONCLUSION.** Vesicovaginal fistulas are among the most distressing complications of obstetric and gynecologic procedures. The condition is a socially debilitating problem with important medicolegal implications. In contrast to the western world, obstetric VVFs remain a major medical problem in many underdeveloped countries with a low standard of antenatal and obstetric care. Due to social barriers patient present late to the surgeons and this changes the scenario of the treatment as seen in longstanding VVF. Augmentation cystoplasty plays a major role in such repairs and also decreases the failure rate prevents the bothersome LUTS.

VID 01 – 04

Laparoscopic Radical Nephrectomy: Technical Nuances

Kangjam Sholay Meitei, Manav Suryavanshi, Vikram Batra, Feroze Zafar, Saurabh Jain, Rajesh Ahlawat

Medanta Kidney and Urology Institute, Gurgaon
Laparoscopic Urology

Introduction & Objectives: Laparoscopic radical nephrectomy (LRN) has significantly reduced morbidity in renal tumor patients. Barring a few centers of excellence, laparoscopy is still not widespread. Renal tumors are done by open large rib cutting incisions leading to increased morbidity. We describe basic steps to perform safe LRN for both sides so as to provide minimally invasive surgery (MIS) benefits to the renal tumor patients. **Materials and Methods:** Based on MKUI laparoscopic donor experience the steps of LRN have been standardized. After standard port placement colonic deflection is performed. Colonic deflection entails identifying renal from colonic fat & respecting the planes. Ureteric pedicle is lifted along with gonadal vein on left & leaving the gonadal vein on right. Tracing the gonadal vein leads to lower margin of renal vein. Sequential opening of planes clears the hilum. A preoperative CT scan helps target the artery. Left side needs handling the lumbar & adrenal vein. Upper pole is mobilized sparing the adrenal or otherwise depending on indication. Extraperitoneal posterolateral mobilization is completed, vessels clipped and transected. Specimen is retrieved from Pfannenstiel incision. **Results:** Average blood loss was 125 ml. Mode length of stay was 4 days. There was no difference in blood loss or length of stay between either sides. **Conclusions:** Indian live laparoscopic kidney donor programmes entail an opportunity to the urologist to transcend the laparoscopic learning curve. This shall extend the benefits of MIS to renal tumors who would have otherwise had to undergo an open radical nephrectomy.

VID 01 – 05

Laparoscopic pyelolithotomy in complex renal calculus

Muneer Khan, Naveed Khan, Syed Sajad, Mufti Mehmood

Kidney Hospital Sonwar Srinagar
Laparoscopic Urology

PCNL remains the standard of care for large renal calculi. laparoscopic pyelolithotomy is an alternative to PCNL. with a few advantages., like the renal parenchyma is not traversed.; hence the hemorrhagic complications of PCNL are not seen. laparoscopic pyelolithotomy is ideal for stones in an extra renal pelvis.; however it can be undertaken in large branched intra renal calculi. A video to this effect is shown wherein large renal staghorn calculi have been extracted from the renal pelvis and calyces using intra corporal lithotripsy.

VID 01 – 06

A Vesicovaginal fistula of Malignant etiology

Sudarshan O Daga, Patwardhan SK, Ismail MA, Tanwar HV

Seth GS Medical College and KEM Hospital, Mumbai
Female Urology

Introduction- Vesicovaginal fistula of malignant etiology poses difficult management challenges. We report a patient 62 year old female who presented to us with a history of leakage of urine per vaginum last 3 years. She had undergone hysterectomy for carcinoma of cervix followed by 25 cycles of radiotherapy. Leak started immediately after surgery. **Materials and methods-** After initial workup, contrast CT abdomen+pelvis was done which was suggestive of bilateral hydronephrosis with 8 mm left lower ureteric calculus with a loss of planes between posterior bladder wall and vaginal vault and 2 cm radiopaque density within. On cystoscopy, there was 3x3 cm defect in supratriangular area and a calculus within. Biopsy from the edge of the fistula was taken and sent for histopathological analysis. As biopsy was negative for malignancy we planned exploration. Intraoperatively, planes between posterior bladder wall and vaginal vault were unhealthy. Frozen section was sent which was positive for malignancy. Hence anterior pelvic exenteration with ileal conduit was done. **Result and Discussion-** Patient had a stable postoperative course. Intraoperative findings supplemented with positive frozen section analysis prompted us to review our decision for VVF repair. **Conclusion-** Meticulous preoperative cystoscopy, intraoperative assessment and frozen section standby is imperative in management of vesicovaginal fistula suspected of having malignant etiology. Thorough discussion with patient preoperatively is also of paramount importance.

VIDEO SESSION - II**VID 02 – 01****Laparoscopic ureterocalicostomy in primary and secondary UPJO****Amit Kumar, Vijay Bhaskar G, Sankar G, Srikanth , Vijay Kumar V , Venu M , Surya Prakash V**Narayana Medical College and Hospital, Nellore
Laparoscopic Urology

INTRODUCTION Ureterocalicostomy is a treatment option in a patient with recurrent ureteropelvic junction obstruction, scarred or intrarenal pelvis, significant lower pole caliectasis, and upper ureteric strictures. It is a well-accepted salvage technique for the failed pyeloplasty. It involves excision of the hydronephrotic lower renal pole parenchyma and anastomosis of the dismembered ureter directly to the lower pole calyx. Laparoscopic ureterocalicostomy is technically feasible option and duplicates the results of open surgery. Case details A 24 yr male presented with left loin pain for 6 months. On evaluation he had right gross hydronephrosis. DTPA showed hydronephrotic right kidney with significant out flow obstruction with impaired renal function. Laparoscopic ureterocalicostomy was done as the pelvis small, intrarenal with a dilated dependant lower calyx. A 34 yr Female presented with left loin pain with history of open left open Pyeloplasty done 10 yrs back. Ultrasonography and IVU showed grossly dilated left pelvicalyceal system. DTPA was showing obstructive pattern in left kidney suggestive of pelviureteric obstruction. Laparoscopic Ureterocalicostomy was done by three port technique. Dense adhesions were noted at the previous anastomotic site. Ureter was dismembered at healthy proximal part and spatulated laterally. Spatulated ureter was sutured to opened lower pole calyx by interrupted 4-0 vicryl sutures. Follow up DTPA renogram done in both the patients showed good drainage. Conclusion Laparoscopic ureterocalicostomy is technically feasible option for recurrent PUJO, scarred or intra renal pelvis, upper ureteric strictures with significant lower pole caliectasis.

VID 02 – 02**Laparoscopic adrenalectomy for a high, retrocaval pheochromocytoma****Kumar Ashish, Desai Pragnesh, Kumar Rajeev**All India Institute of Medical Sciences, New Delhi
Laparoscopic Urology

Introduction: Laparoscopic adrenalectomy is the standard treatment for pheochromocytomas. On the right side, some tumors may lie high behind the liver and extend behind the vena cava, making access difficult. We present a video highlighting the steps for safe performance of laparoscopy for such lesions. **Material and Method:** A 45 yrs old woman was diagnosed to have medullary carcinoma thyroid and bilateral adrenal pheochromocytomas. She underwent total thyroidectomy and bilateral neck dissection for medullary carcinoma thyroid before presenting to us for management of bilateral adrenal lesions. She had elevated 24 hour urinary VMA and bilateral adrenal lesions of around 3cm and was planned for bilateral laparoscopic adrenalectomy. The left side surgery was performed first and was uneventful. On the right side, 4 ports were used. After peritoneal incision, the adrenal was seen to extend high behind the liver and IVC. Unlike a standard adrenalectomy, inferior and lateral mobilization was performed first, keeping a handle of tissue for traction. Medial dissection from the vena cava was then begun from the lower border. An adrenal vein avulsed off the vena-cava and was controlled with suture ligation. The cranio-medial pedicle was progressively narrowed to isolate the superior adrenal vein before ligation. **Results:** The operative time was 240 minutes and blood loss was 300mL for both procedures. She required steroid replacement and was discharged on 3rd post-operative day with no complications. She was normotensive at discharge. Histopathology confirmed bilateral pheochromocytoma. **Conclusion:** Laparoscopy is feasible and safe for adrenal tumors even in difficult locations. Intraoperative complications can be managed laparoscopically by expert teams.

VID 02 – 03**Robotic Surgery in Post High Intensity Focussed Ultrasound recurrent Prostate cancer****Sudhir Rawal, Amit Goel, Amitabh Singh, Suhas K R, Saurabh Vashishtha**Rajiv Gandhi Cancer Institute and Research Centre
Laparoscopic Urology

Introduction and Objectives: High Intensity focussed Ultrasound (HIFU) is a minimally invasive method of coagulation that ablates prostatic tissue with high precision. However the actuarial biochemical failure- free and actuarial disease –free survival rates at 5 years reported in studies is 77% and 66% respectively. There are few reported salvage treatment of Post HIFU recurrent prostate cancer. We present 2 cases of Robotic surgery in Post HIFU recurrent Prostate cancer . **Methods** 104 patients underwent High Intensity Focussed Ultrasound (HIFU) from June 2009 to Jan,2014. **Case-1:** 62year male patient with Post EBRT / Post HIFU operated for Robotic Partial Cystectomy for excision of Right lateral wall bladder and Right lower ureteric mass with Left ureteric stenting with Right Ureteric Reimplantation with Right DJ stenting. **Case-2:** A 58 year male Post HIFU operated for Bilateral Nerve Sparing Salvage Robot assisted laparoscopic prostatectomy. We demonstrate 2 cases of Post HIFU Partial Cystectomy and Salvage RALP in recurrent Carcinoma Prostate with da Vinci Robotic system. **Results:** Robotic Partial cystectomy and ureteric reimplantation and Robotic Salvage Radical Prostatectomy in Post HIFU recurrent Carcinoma prostate were technically successful. Estimated blood loss was 200ml and 400 ml . Operative time was 135min and 120 minutes. Perurethral catheter was removed on 21 days and tenth day. Post operative hospital stay was 5 and 2days. At 3 month follow up patient sPSA was 0.77 and 0.137.. **Conclusions.** Robotic Surgery in Post HIFU recurrent Carcinoma prostate is technically feasible with good oncological results if done in appropriately selected patients with minimal morbidity.

VID 02 – 04**Total intracorporeal robot-assisted laparoscopic radical cystectomy with ileal conduit (bricker) urinary diversion****Pushkar P, Taneja R, Sharma MK**Indraprastha Apollo Hospital, New Delhi
Laparoscopic Urology

INTRODUCTION & OBJECTIVES: Robot-assisted laparoscopic radical cystectomy (RALRC) has proven to reduce morbidity after cystectomy. Many centers are doing robot assisted laparoscopic radical cystectomy with extracorporeal urinary diversion. Things have evolved and now a days urinary diversion is being performed intracorporeally along with radical cystectomy. We present a video where robot assisted laparoscopic radical cystectomy with urinary diversion has been performed intracorporeally with gratifying results. **METHODS:** A 60 year old gentleman, nonsmoker presented to us with haematuria. TURBT was done which showed muscle invasive Transitional cell carcinoma. Metastatic work up showed localized disease. He underwent totally intracorporeal Robotic Assisted Laparoscopic Radical Cystectomy with ileal conduit (Bricker) urinary diversion. Davinci SI robot (Intuitive Surgical, Sunnyvale, CA) was used. **RESULTS:** Operative time was around 5 hours and 45 minutes & intra operative blood loss was 400-500cc approximately. Post-operative recovery was uneventful. One unit of PRBC was transfused on Day-1. He was kept in surgical ICU for 1 day for observation. Oral diet was allowed on POD-2 as bowel movements returned. Drain was removed on 4th POD and he was discharged on 6th POD. HPE showed Grade 3 TCC with adenocarcinoma of prostate (Gleason's score 4+3). Post-operative S.PSA was 0.016 ng/dL. **CONCLUSION:** RALRC with totally intracorporeal urinary diversion is technically feasible with good intermediate-term oncologic results. Our initial experience with robotic-assisted laparoscopic intracorporeal diversion appears to be favorable with acceptable operative and short-term clinical outcomes.

VID 02 – 05**Laparoscopic pyelolymphatic disconnection in patients with refractory chyluria- our experience****Sharma P, Singh BP, Kumar M, Sharma K, Sankhwar S N, Goel A, Singh M**

King George Medical University Lucknow
Laparoscopic Urology

Introduction and objective- Incidence of chyluria in filariasis is up to 10%. With varied options for management, this debilitating disease is famous for recurrences. We wish to share our experience of laparoscopic pyelolymphatic disconnection (LPLD) in refractory cases of chyluria. **Material and methods-**Data of 4 patients who were managed by laparoscopic pyelolymphatic disconnection from January 2012 to May 2014 was retrospectively analyzed. All patients were evaluated with detailed History of present and past illness, physical examination. Urine for chyle, triglyceride, protein and routine blood investigation, serum proteins and lipid profile and USG, IVP, cystoscopy and retrograde pyelography was done in all patients. A fatty diet was given 24-36 hour prior to surgery. Lateral decubitus position made and 4 ports were used. In all patients procedure involved nephrolympholysis, hilar stripping and ureterolympholysis. Patients were first followed-up at 4 weeks then 3 monthly and were evaluated with history, physical assessment laboratory evaluation as in pre-treatment period. **Results-** Mean age, weight, grade of chyluria, operative time, analgesic requirement, Hemoglobin drop was 34.7 years, 46.7 kg, grade 3 in three patients, 178 minutes, 324 mg, 0.7mg% respectively. Urine became clear immediately in all patients after surgery. Mean post-operative hospital stay was 5.5 days. All patients were doing well till last follow up. **Conclusion-**Laparoscopic pyelolymphatic disconnection is safe and effective in patients with refractory chyluria with lesser morbidity and offers greater degree of dietary freedom.

VID 02 – 06

Surgical Video Demonstration Of Transperitoneal Laparoscopic Pyeloplasty

Samir Swain

SCB Medical College & Hospital, Cuttack
Laparoscopic Urology

INTRODUCTION To report our initial experience in treating patients of UPJ obstruction by transperitoneal laparoscopic pyeloplasty. **Methods** 15 patients with UPJ obstruction were submitted to transperitoneal laparoscopic pyeloplasty. Dismembered pyeloplasty technique was utilized in all cases. Follow-up was carried out by ultrasonography initially, and diuretic renal scintigraphy and/or intravenous urography at least 6 months after the removal of the stent. **Results :** The study group consisted of 10 males and 5 females with the mean age of 30.4 years (range, 22 to 45 years). Mean operative time was 135 minutes (range, 110 to 180 minutes) and mean hospital stay was 4.6 days (range, from 3 to 10 days). Mean follow-up was 10.1 months (range, 6 to 18 months). The overall success rate was 80% (8 cases). Post operative Pain after DJ removal was experienced in 1 case. There was no conversion to open surgery with no major complications or required blood transfusion. **Conclusions** Laparoscopic pyeloplasty is a promising method in treating patients of UPJO.

VIDEO SESSION - III

VID 03 – 01

Laparoscopic exploration and nephrectomy for grade IV blunt renal trauma

Rizvi SJ, Valsangkar R, Goyal NK, Bansal J, Bhandari NS, Modi PR

Institute of Kidney Diseases and Research Centre & Institute of Transplantation Sciences, Ahmedabad
Laparoscopic Urology

Introduction & objectives: Laparoscopy has been rarely used in the management of abdominal trauma. We present a video of successful management of blunt renal trauma using laparoscopy. **Materials and methods:** an obese thirteen year old boy sustained blunt injury to the right side of his abdomen following collision while riding a two-wheeler. He presented 15 hours after the injury with a history of hematuria and increasing right flank pain and stable vitals. Contrast CT scan of the abdomen revealed a large right peri-renal hematoma with absence of enhancement in the lower two thirds, and extravasation of contrast from the collecting system of the upper part of the kidney. The patient

underwent laparoscopic exploration. The abdomen was systematically explored, noting the presence of a laceration of the liver and a right retroperitoneal haematoma. The patient was placed in the right flank position. An interaorto-caval dissection was done and the right renal artery clipped near its origin. The renal vein was then clipped and divided, and the Gerota's fascia with enclosed hematoma mobilized, entrapped and extracted. **Results:** operating time was 170 minutes and blood loss was about 300 ml. There were no intraoperative complications. The patient was mobilized on the first post-operative day, discharged on post-operative day 4 and went back to school on day 8. **Conclusions:** in well selected patients with severe renal injury requiring nephrectomy, laparoscopy can be safe and effective, while avoiding the morbidity related to a full laparotomy.

VID 03 – 02

Laparoscopic transperitoneal pyeloplasty with pyelolithotomy in a 7 year old boy

Agrawal T, Gupta R, Kumar R

All India Institute of Medical Science, New Delhi
Laparoscopic Urology

Introduction: Crossing vessels may be a cause of ureteropelvic junction obstruction (UPJO). However, they may also be an incidental finding in patients with an intrinsic UPJO. We present a video of a child with primary UPJO with secondary calculi, who was found to have crossing vessels that were deemed non-obstructive. **Materials and methods:** A 7 year boy presented with hematuria and right flank pain of 1 year duration. Intravenous urogram revealed UPJO with 2 renal calculi; 1.2 cm in pelvis and 0.9 cm in the inferior calyx. Renal function was normal. 4-port laparoscopic transperitoneal pyeloplasty was performed. All ports were 5mm, the camera port was later converted to 10mm. Crossing vessels-both artery and vein-were identified at the lower pole and mobilized but were deemed non-contributory to the obstruction. After dismembering the pelvis, a 12Fr rigid nephroscope was introduced through a port and the stones were extracted using a basket and placed in a specimen bag. The pyeloplasty was completed with 5-0 Vicryl(R) sutures without transposing the vessels. **Results:** The operative time was 90 minutes and blood loss was minimal. Stone clearance was complete. The urethral catheter was removed on day 1 and drain at day 2 after surgery. There were no complications. The stent has not yet been removed. **Conclusion:** Laparoscopic pyeloplasty with endoscopic pyelolithotomy is safe and feasible in expert hands. Not all crossing vessels need transposition during surgery.

VID 03 – 03

The use of monopolar hook as single energy source during laparoscopic live donor nephrectomy: economical, viable and safe

Jairath Ankush, Mishra SK, Ganpule A, Sabnis RB, Desai MR

Muljibhai Patel Urological Hospital Nadiad
Laparoscopic Urology

Introduction: Laparoscopic Live Donor Nephrectomy (LLDN) is now the gold standard and preferred method for kidney harvestation in Renal Transplant surgery. Although many different energy sources have been developed, some of them are expensive and are not widely available. We demonstrate the technical aspects of the use of hook with monopolar as single energy source during laparoscopic live donor nephrectomy. **Materials and Methods:** The main technical aspects include: 1) Use of monopolar generator at power settings of 70 Watts of pure coagulation current prevents charring of the tissue thus adequate cutting can be achieved using hook electrodes even in pure coagulation settings, 2) Holding the hook in pen-shape fashion close to the port, avoid tremors and gives stability to surgeon's hand, 3) Triggering foot pedal and hand piece intermittently decreasing the chances of surrounding tissue injury, 4) Tip and the back side of hook used for precise clean cuts and concave side (larger surface area) for coagulation. These elements are demonstrated in the video of a female patient selected for left live donor nephrectomy. **Results:** Until date we have registered 32 procedure using hook as single energy source. Mean operative time has been 137±45 min, hemoglobin drop of 1.01±0.57 g/dL with no intraoperative complications and the mean hospital stay being 2.5±1.0 days. **Conclusion:** The biophysics of monopolar energy is as important as the knowledge of anatomical planes for its safe use. The use of hook as single energy source

during laparoscopic nephrectomy is economical, viable and safe when performed by surgeons with laparoscopic experience.

VID 03 – 04

Laparoscopic Partial Nephrectomy for localized renal tumours – an expanding and feasible option

Vijaya Bhaskar Reddy, V.Surya Prakash, Vijaya Kumar, Venu, Amit Kumar, Sankar, Srikanth

Narayana Medical College, Nellore
Laparoscopic Urology

Laparoscopic Partial Nephrectomy for localized renal tumours – an expanding and feasible option Introduction: Nephron-sparing surgery has emerged as the treatment of choice for the incidentally detected small renal tumors <4 cm (T1a) and now expanding to tumors <7 cm (T1b) in size. Few cases of T2 >7 cm are performed safely. We describe our technique and experience with 3 Lap partial nephrectomies for renal tumours. Methods: Between Jan 2014 and June 2014, 3 renal tumors were detected incidentally. All patients were assessed by RENAL scoring and subjected to laparoscopic partial nephrectomy. Results: Mean tumor size was 5.6 cm (range 3.8 to 8.5cm). Hemostasis was achieved by hilar vascular clamping and one case by without vascular clamping. Renal Parenchyma was sutured laparoscopically using 2-0 barbed suture by cinching Hem-o-lock clips. Ischaemia time was 35 and 40 minutes each in 2 cases. All three patients were discharged uneventfully on 5th post operative day. Histopathology revealed clear cell, chromophobe and mucinous tubular and spindle adenocarcinoma with negative margins. Conclusion: Laparoscopic partial nephrectomy (PN) offers equivalent oncologic outcomes to radical nephrectomy (RN) but also has greater preservation of renal function and less risk of chronic kidney disease and cardiovascular problems. It is a technically challenging and demands high laparoscopic skills.

VID 03 – 05

Laparoscopic anterior exenteration for Gartner's gland adenocarcinoma

M Ramalingam, K Senthil, M Anandan, MG Pai

PSGIMSR Coimbatore
Laparoscopic Urology

Introduction: Malignancy arising from gartner's gland is very rare. Management of such tumours is anterior exenteration. We present the video of laparoscopic anterior exenteration for a female with gartner's cystadenocarcinoma. Methods: A 42 yr old lady presented with complaints of severe dysuria with voiding symptoms. On examination she was well preserved and she had a hard mass in the anterior vaginal wall without involvement of the vaginal mucosa overlying the urethra. MRI pelvis showed a T2 hyperintense mass between the anterior vaginal wall and urethra involving the urethra and bladder neck. Cystoscopy revealed distortion of the urethra and bladder neck with a solid mass in the region of bladder neck and trigone. TUR biopsy of the lesion was done and reported as adeno carcinoma. Under GA, with the patient in the supine position with trendelenberg tilt, through 5 ports, laparoscopy was done. Urachus was taken along with the bladder and Retzius space was developed and dissection continued till the urethra. Peritoneotomy was done lateral to the iliac vessels and both the ureters were dissected and divided close to the bladder. The lateral pedicles of the bladder were dissected clipped and divided. Peritonotomy was made in the pouch of Douglas and plane developed between uterus and rectum. Uterine pedicles were clipped and divided. Bilateral iliac lymph node dissection was done. Periurethral incision was made to include the vaginal mass with a 1 cm margin and the entire specimen (urethra, bladder, uterus, and the vaginal wall overlying the mass) was removed vaginally. A 5 cm subumbilical incision was made and heterotopic Studer neobladder was constructed with catheterisable conduit using the appendix (Mitrofanoff Principle). Results: The operating time was 380 minutes and blood loss was 250ml. Post operatively patient was started on oral diet on post op day 5 and drains were removed on 10th post operative day. Cystogram done on 21st post operative day showed no leak and SPC was removed. Patient is on clean intermittent catheterisation through the mitrofanoff stoma. Pathology revealed adenocarcinoma, negative lymph nodes and the margins were free Conclusion: Laparoscopic anterior exenteration is an effective alternative to open surgery for selected patients with organ confined bladder and urethral tumours.

VID 03 – 06

Laparoscopic Pyelolithotomy in an Ectopic Pelvic Kidney

Ashwin Kulkarni, Dinesh D Patel

Devasya Superspeciality Kidney Institute & Research Centre
Laparoscopic Urology

Background and Objectives: Ectopic pelvic kidney with large calculus is a rare entity & challenging to treat by minimally invasive method. Laparoscopic pyelolithotomy was performed in an ectopic pelvic kidney with large renal calculi. Methods and Results: Laparoscopic pyelolithotomy was successfully performed in an ectopic pelvic kidney by transperitoneal route. Intracorporeal suturing was done laparoscopically. Operation time was 74 minutes. 100% stone clearance was achieved. The patient was discharged on the second post operative day. Conclusion: Laparoscopic pyelolithotomy is the most effective treatment option for management of stones in the pelvis of an ectopic pelvic kidney.

VID 03 – 07

Feasibility and Efficacy of Laparoscopic Cystectomy : Single Surgeon Experience

Uttam Mete

PGIMER, Chandigarh
Laparoscopic Urology

Introduction: Cystectomy whether radical, partial or simple can be performed laparoscopically. Laparoscopic radical cystectomy (LRC) as minimally invasive procedure is just one and a half decade old. The majority of papers published on LRC have focused mainly to the description of the operative technique as it needs great surgical skill. The current series has convincingly proved that this procedure is feasible. Material & Methods: The steps are similar to classical ORC (Open Radical Cystectomy). The patient was placed in low lithotomy position with the operative table in a 45 degree Trendelenberg tilt. 5 port transperitoneal approach was preferred. Two components of the procedure namely i) lymphadenectomy & ii) cystectomy were performed totally laparoscopically. Cystectomy steps included ureteral identification, posterior dissection, control of lateral pedicles, anterior dissection and ligation of DVC, division of urethra and specimen removal. Lymph node dissection was performed either before or following cystectomy. The urinary diversion was performed extracorporeally either ileal conduit or orthotopic neobladder were reconstructed. Results: A total of twenty laparoscopic cystectomies were performed. These included two cases of laparoscopic simple cystectomy one each for refractory haemorrhagic cystitis following pelvic radiation & interstitial cystitis and one case of partial cystectomy with enblock excision of urachus for urachal adenocarcinoma. The summary of outcome measures are as follows Outcome Parameter LRC Average Blood Loss <400 ml Total Operative Time 300-400 min Technical Difficulty Needs Great Skill Postoperative Pain Significantly Less Return to full activity 2-3 Weeks Hospital Stay 8-12 days Cosmetic appearance Smaller Scars Surgical margin positivity 5% Positive lymph nodes 15% Nodal Harvest 12-27 Morbidity Major 10% Discussion: There is ongoing debate whether LRC, the new technique should replace the older one, ORC. Published literature has confirmed prolonged operative time is the main hurdle. What is lacking is the oncological outcome data as to prove or disprove its equivalence to open radical cystectomy (ORC). In view of shorter follow-up data, Jury is still out to judge its superiority over ORC in terms of oncological efficacy. Steps of laparoscopic simple cystectomy for benign disease are not different from LRC. However, it may be challenging as tissue planes may be ill defined in benign conditions like radiation cystitis, tubercular cystitis etc. Chances of intraoperative injury of bowel or vascular structures are very high. Partial cystectomy specially with enblock excision of urachus for urachal adenocarcinoma has been performed successfully in the published literature as the steps are same and not difficult for the laparoscopic surgeon performing LRC regularly. Conclusion: This study confirmed undoubtedly that LRC is feasible. The advantages of LRC are decreased blood loss, improved operative vision, reduced hospital stay & postoperative pain. However, these advantages need to be judged against increased technical difficulty & longer operative times. Due to shorter follow-up oncological outcomes are still unproven. This series confirms LRC is an alternative procedure to ORC and may be time is not yet ripe to declare it as the replacement of ORC

VIDEO SESSION - IV

VID 04 – 01

Bladder neck preservation and nerve preservation in laparoscopic radical prostatectomy

GINIL KUMAR POOLERI

Amrita Institute, Kochi
Laparoscopic Urology

Aim and objective Laparoscopic radical prostatectomy is a technically challenging surgery. We preserve the bladder neck and the pelvic nerves in patients in whom MRI do not show a bladder neck or neural bundle involvement. This has reduced the chance of incontinence and ED in post operative period. Method: Patient was positioned in low lithotomy with trendelenberg position. The extra peritoneal space was created by blunt dissection and extra peritoneal radical prostatectomy was done. Technique of bladder neck preservation and nerve preservation is demonstrated in this video Results: Bladder neck preservation can be done in extra peritoneal radical prostatectomy and it helps the further dissection in the posterior aspect so that the nerve preservation can be done effectively. Bladder neck preservation and avoiding cautery and harmonic around the neurovascular bundle helps in early recovery of continence and preservation of erectile function in good number of patients. Conclusion: Bladder neck preservation and nerve preservation better the outcome of laparoscopic radical prostatectomy

VID 04 – 02

Robot-assisted transperitoneal intravesical bladder diverticulectomy

Rakesh Khara, Prasun Ghosh, Manav Suryavanshi, Gagam Gautam, Vikram Batra, Rajesh Ahlawat

Medanta the Medicity, Gurgaon
Laparoscopic Urology

INTRODUCTION: We report 2 cases of robot-assisted transperitoneal intravesical bladder diverticulectomy **PATIENT AND METHODS:** Our patient was a 48 -year-old male with a history of lower urinary tract symptoms secondary to bladder neck obstruction for 6 years with recurrent urinary tract infection. CT urography showed a 7-cm diverticulum in the posterior bladder wall. **RESULTS:** Transperitoneal robot-assisted intravesical diverticulectomy was performed with the Da Vinci 4-arm system (Intuitive Surgical Inc., Sunnyvale, Calif., USA) without perioperative complications. Operative time was 80 min and blood loss less than 100 ml **CONCLUSIONS:** Robot-assisted bladder intravesical diverticulectomy is safe, effective, reproducible and minimally invasive.

VID 04 – 03

Minimally invasive ureterolysis for Idiopathic retroperitoneal fibrosis (IRPF): Technical caveats and Cautions!

Vikram Shah Batra, Manav Suryavanshi, Sholay Meitei, Deepak Rathi, Lalit Bansal, Rajesh Ahlawat

Medanta the Medicity Gurgaon
Laparoscopic Urology

Introduction Laparoscopic ureterolysis is a salvage procedure when after expending conservative management in IRPF. . Initially described by Ormond/Albarran the disease can extend anywhere in retroperitoneum and typically engulfs the ureters and the great vessels. Dissection is necessarily difficult and minimally invasive approaches must be applied with certain considerations. Materials and Methods A 43 year with severe back pain was evaluated and diagnosed as left hydrouretronephrosis with scarring and dense fibrotic tissue encasing the left ureter and the bifurcation of the great vessels near the pelvic brim. The disease treatment mandated histopathological diagnosis. Image guided biopsy was technically not possible. Patient underwent laparoscopic ureterolysis, biopsy and omental wrap. The patient was stented pre-dissection. Pneumoperitoneum was established in left flank position. Caudal shift was applied to Medanta standard Donor port arrangement. Colonic deflection was performed. Dense

scarring was encountered at the bifurcation of great vessels. A combination of blunt and sharp dissection with tactile feedbacks in laparoscopy allowed separation and delineation of ureter amidst identification of critical anatomical landmarks. Omental wrap was placed around the ureter and surgery culminated. Results A total of 19 renal units in 14 patients have been managed. In the present case operative time 35 minutes, estimated blood loss 75 ml and hospital stay 3 days. Conclusion Minimally invasive surgical managements may be judiciously extended to salvage procedures with a low threshold for conversion to open. This helps open new frontiers widening the urological horizon. Minimally invasive benefits accrue anyways to an extended urological subset.

VID 04 – 04

Right robotic pyeloplasty (dismembered) and right ovarian cystectomy

Avinash Dutt Sharma, Amlan Chakraborty

Apollo Gleneagles Hospital , Kolkata
Miscellaneous

We present a case of thirty two years female patient, who presented in department of Urology (Apollo Hospital, Kolkata) with chief complaints of pain in right lower abdomen and dysuria for 2-3 months. Clinical and physical examination was within normal limits. Computed tomography (CT) scan of abdominal and pelvic region revealed right ectopic (pelvic) hydronephrotic kidney with right large (6 x 4.5 cm) ovarian cyst. DTPA Renal scan was done, which showed normal functioning left kidney and right kidney showing diminished function (30%) with type II (obstructive curve). Pre-anaesthetic check up was done. Cystoscopy and right RGP (retrograde pyelography) was done, which showed right ureteral ectopia(non-refluxing) and right pelvic-ureteric junction obstruction. Right robotic pyeloplasty (dismembered) and right ovarian cystectomy was done. Post operative period was uneventful.

VID 04 – 05

Open uretero-ureterostomy in complete duplication

George AJP, Singh JC, Devasia A

CMC Vellore
Paediatric Urology

Introduction: Ureteral duplication is the most common renal abnormality occurring in approximately 1% of the population. However complete ureteral duplication with ectopic upper moiety ureter is rare. **Case Summary :** This 1 year old girl, on evaluation of urinary incontinence, was found to have a left complete duplication with the functioning upper moiety ureter opening ectopically distal to the bladder neck in a ureterocele. She also had upper moiety hydro-uretero nephrosis. This video demonstrates an accepted treatment of uretero-ureterostomy, especially in the setting of a non refluxing lower moiety ureter. **Video presentation Conclusion :** Uretero-ureterostomy is a good option in complete ureteral duplications requiring surgical intervention

VID 04 – 06

Unilateral ureteral triplication with duplex renal moiety and dilated ureter

PP Singh, Bhaskar Borah, Avijit Mohanty, Brijesh Sardha

Batra Hospital and Medical Research Centre, New Delhi
Paediatric Urology

Introduction : Most patients with duplex kidneys are asymptomatic, with genitourinary abnormalities being detected incidentally on imaging performed for some other reasons. **Material & Methods :** We report a case of duplex renal moiety with ureteral triplication, with one dilated ureter having stenosis at its lower end and dysplasia of upper moiety of the kidney. The child presented with recurrent attacks of pain in right upper abdomen. Routine blood and urine tests were within normal limit. Contrast enhanced CT scan of Abdomen shows triplicate ureter with duplex renal moiety. The child successfully underwent laparoscopic upper pole partial nephrectomy and ureterectomy (removal of the dysplastic part of kidney and dilated ureter). **Results :** The patient is well 6 months postoperatively with no pain abdomen and stable renal function. **Conclusion :** While

many patients are asymptomatic or have only mild symptoms, diagnosis of such congenital abnormalities is important to avoid complications and progressive renal damage.

VIDEO SESSION - V

VID 05 – 01

Osteotomy in Bladder Exstrophy

Ramesh C, Ramesh Babu, Venkatramanan, Sunil Shroff

Sri Ramachandra Medical College, Porur, Chennai
Paediatric Urology

Aims: To report two cases of failed bladder exstrophy and describe two different osteotomy techniques. **Methods:** a 1-year-old female child who underwent primary exstrophy repair at birth presented with failed bladder closure and incontinence. Posterior iliac osteotomy and re-do exstrophy repair was performed. A 4-year old boy with failed exstrophy repair presented with dribbling and epispadias. As he had undergone posterior iliac osteotomies earlier, anterior innominate osteotomy, bladder closure and epispadias repair was performed. **Results:** In both cases, osteotomy helped in re-do repair of exstrophy and abdominal closure. Post operative outcome was uneventful and both patient had successful closure and are awaiting bladder neck procedure **Conclusions:** Osteotomy is an essential part to achieve successful closure following failed primary repair. Videos of the different technique are presented.

VID 05 – 02

Surgical video presentation of sex reassignment surgery from male-to-female

Samir Swain

SCB Medical College, Cuttack
Reconstructive Urology

INTRODUCTION Sex reassignment surgery from male-to-female involves reshaping the male genitalia of trans women to a form with the appearance of and, as far as possible, the function of female genitalia. The first male-to-female surgeries had been performed in the United states in 1966 at the John Hopkins Medical Center by Dr. Elmer Belt. **GENITAL SURGERY** During this procedure of changing anatomical sex from male to female, the testes are removed and the skin of penis is usually inverted, as a flap preserving blood and nerve supplies to form a fully sensitive vagina i.e known as vaginoplasty. A clitoris fully supplied with nerve endings can be formed from part of the glans penis. **RESULTS.** The aesthetic, sensational, and functional results of vaginoplasty vary greatly. With current procedures, trans women cannot have ovaries and uterus hence are unable to bear children or menstruate. They will need to remain on hormone therapy after their surgery to maintain female hormonal status.

VID 05 – 03

Reconstruction of groin defect following radical inguinal lymphadenectomy

Vinayak G Wagaskar, Mohd. Ismail, Sujata Patwardhan

KEM Hospital Mumbai
Reconstructive Urology

Introduction & Objective: Inguinal lymph node involvement is an important prognostic and prognostic factor in various neoplasms of genitalia and lower limb. Morbidity of inguinal lymphadenectomy includes lymphorrhoea, lymphedema and infection; however most common distressing complication is skin necrosis. Myocutaneous flaps have been the most popular form of primary or delayed groin reconstruction. This video depicts reconstruction of groin defect with fasciocutaneous ALT flap. **Methods:** Patient is 34 year old male. He underwent below-knee amputation for Marjolin's ulcer. He developed fungating groin mass of lymph node of the same side. FNAC s/o squamous cell carcinoma. **Results** Patient underwent radical inguinal lymphadenectomy with excision of skin involving fungating mass. Fasciocutaneous ALT pedicled Flap taken and placed over groin defect. Remaining skin from ALT flap site is covered with superficial skin grafting of contra lateral thigh. Postoperative course was

uneventful. Patient accepted ALT flap well with minimal skin necrosis at the Superficial skin grafting site. **Conclusion:** This video depicts successful reconstruction of groin defect with fasciocutaneous ALT flap in a patient of post-Marjolin's ulcer fungating lymph nodal mass.

VID 05 – 04

LMG urethroplasty for female urethral stricture

Prashant Kumar Singh, PB Singh, Jigyasa Singh, Pawan Kesharwani & Jagdeep Balyan

Max Superspeciality Hospital Delhi
Reconstructive Urology

Total 13 female presented to us with difficulty in passing urine and thin stream of urine. Out of 13 patients 12 were already on intermittent dilatation with period varying from 15days to 2 months with persistent morbidity. All female underwent uroflowmetry and micturiting cystourethrogram (MCU). If patient has recent dilatation, they were advised to wait till urinary stream becomes poor. At that time she was advised to undergo uroflowmetry and MCU. MCU classically show narrowing distal urethra. These patients were prepared for surgery after getting clearance from anaesthesia. All underwent LMG urethroplasty with indwelling foleys catheter for 3 weeks. Peri-catheter study was performed before giving voiding trial. Total 13 female patient underwent LMG urethroplasty with follow-up ranging from 4years to one month. All patients had uneventful recovery without any major complications. All women voided with good stream with an average peak flow of 20ml/sec. These patients who need frequent urethral dilatations are without any lower tract symptoms or obstructive flow in follow-up. Two patients had mild obstructive flow at follow-up around 9 to 12 months and on calibration found to have mild hold up proximally. Distal augmented urethra was normal. They responded to self dilatation but requirement was infrequent. Now these women are having good quality of life.

VID 05 – 05

Robotic assisted laparoscopic living donor nephrectomy

Bhattu Amit, Ganpule AP, Mishra SK, Sabnis RB, Desai MR

Muljibhai Patel Urological Hospital, Nadiad
Renal Transplantation & Vascular Surgery

INTRODUCTION : Laparoscopic approach is standard of care for living donor nephrectomy. The objective of this study was to evaluate the technique of robotic donor nephrectomy. **METHODS:** After written, informed and valid consent from living related voluntary kidney donor robotic donor nephrectomy was done with Da Vinci ® Si. (Intuitive surgical Inc.). In two donors right and in one donor left donor nephrectomy was done. Three robotic 8 millimetres ports were placed. Two 12 millimetres ports, one for robotic camera and another for assistant were placed. 5 millimetres port was placed in right sided nephrectomy for liver retraction. Pfannenstiel retrieval incision was placed at the beginning of the procedure and deepened upto preperitoneal space. On right side additional 15 millimetres port was placed through the retrieval incision for applying the vascular stapler. The steps of transperitoneal nephrectomy included reflection of bowel, lifting up of the ureterogonadal packet, hilar dissection, upper polar dissection, cutting ureter with cold scissor, clipping and cutting of the artery and vein preserving maximum length of artery and vein towards graft, graft retrieval and check laparoscopy. **RESULTS:** Donor's total operative time, retrieval time, warm ischemia time, VAS score at 6 and 24 hours, hospital stay was 151±53 minutes, 153±42 seconds, 228±78 seconds, 5.3±0.6 , 2.7±0.6 , 1.4±0.2 grams/deciliter, 73±1.2 hours respectively. There were no donor complications. Recipient's serum creatinine one month post transplantation was 1.16±0.3 milligrams/deciliter. **CONCLUSIONS:** Robotic donor nephrectomy is safe and efficacious procedure. Multicentric randomised trials comparing robotic vs. laparoscopic approach for donor nephrectomy with long term graft function outcome evaluation are necessary.

VID 05 – 06

Right sided laparoscopic donor nephrectomy – The technique

Gulia AK, Kumar A, Chauhan U, Dassi V

Fortis & Max Hospital, Delhi
Renal Transplantation & Vascular Surgery

Introduction Right sided laparoscopic donor nephrectomy is difficult due to short renal vein. Therefore, many surgeons have a bias to prefer left kidney for donation. In this video presentation, we demonstrate ways to overcome difficulties associated with right sided laparoscopic donor nephrectomy. **Material & Methods** From Sept 1999 to June 2014, 1650 laparoscopic donor nephrectomies were done. Of these, 110 were right sided and 1540 were left donor nephrectomies. Results Mean operative time was 115 ± 20 minutes. Warm ischemia time was 4 ± 1 minutes and operative blood loss being 180 ± 80 ml. No renal graft was lost due to injury or primary non function. Mean hospital stay was 3 ± 1 days. There were six conversions to open in initial 25 cases. In three patients there was bleeding from renal vein tributaries or IVC, which was controlled laparoscopically. **Conclusion** With adequate experience right sided donor nephrectomy can be done laparoscopically in a safe manner.

VIDEO SESSION - VI

VID 06 – 01

Radial forearm free flap for urethral reconstruction in patient with failed urethroplasty with bulbar urethral loss

Pathak H., Sharma A., Shaikh I., Chaudhari R.

TN Medical College & BYL Nair Ch Hospital Mumbai
Stricture Urethra

Introduction: Management of failure after progressive perineal urethroplasty for posttraumatic urethral stricture is revision urethroplasty. Management of patients having multiple failed urethroplasty with urethral loss is not standardized. We present a case in which radial artery forearm free flap was used for urethral reconstruction. **Material and Methods:** A 20 year old male presented to us with history of progressive perineal urethroplasty done in June 2012, after catheter removal patient went into retention, SPC was done, urethroscopy showed blind end at bulbar urethra for which perineal urethrostomy with laying open of bulbar urethra was done, patient developed stenosis of perineal stoma for which stoma refashioning was done which again got stenosed. Patient as investigated with DRU, expression cystogram which revealed normal penile urethral with blind end at penobulbar junction, SPCscopy revealed blind end at proximal bulbar urethra. With this patient underwent scrotal drop back urethroplasty with perineal urethrostomy done which failed. Radial artery forearm flap free flap was done in which 9 cm urethral defect was reconstructed using skin tube based on radial artery which was anastomosed to inferior epigastric artery. Urethrogram done after 6 weeks showed small fistula at distal anastomosis which was managed by keeping catheter for 2 weeks. **Result :** Urethroscopy at 4 month revealed normal caliber urethra. Uroflowmetry showed maximum flow rate of 27ml/sec. **Conclusion** Free tissue transfer has the benefit of introducing reliable, robust and well-vascularised tissue suitable for long urethral reconstruction Radial free forearm flap is an excellent method in difficult cases of secondary reconstruction.

VID 06 – 02

Vesical Endometriosis

Harshwardhan V Tanwar, Mohd. Ismail, Sujata Patwardhan

GSMC & KEM Hospital, Mumbai
Uro Oncology

INTRODUCTION AND OBJECTIVES: Genitourinary endometriosis is a rare condition with involvement of the urinary tract in 1% to 5%. Endometriosis of urinary tract in postmenopausal women is extremely rare because endometrial tissue survives on oestrogen for growth and regresses after menopause, only one case has been reported till date. We report a case of endometriosis of bladder in 60-year-old postmenopausal woman. This case documents that urinary involvement by endometriosis may persist even after years of hormonally castrated state. **METHODS:** 60 years old female, postmenopausal, presented with gross hematuria since 15 years, dysuria and suprapubic pain. She was operated for total hysterectomy with bilateral salpingoopherectomy 10 years back for uterine myomas. The patient had not received any estrogen therapy and the hormone levels were normal. A CT scan of the pelvis revealed a nonenhancing soft tissue

lesion involving fundus of urinary bladder. On cystoscopy, large nodular mass involving fundus and anterior bladder wall was seen which on biopsy showed urothelial mucosa with endometrial tissue staining positive for oestrogen and progesterone. **RESULTS:** A cystectomy with ileal conduit was performed in our patient. No recurrence was noted on follow up at three months. **CONCLUSION.** Though extremely rare vesical endometriosis should be included in differential diagnosis in women with cyclic voiding symptoms, after pelvic surgery. Postmenopausal endometrial tissue might come from residual effect of extra ovarian estrogen or migration at the time of past gynaecological surgery. The urologist should maintain high index of suspicion and consider endometriosis of the bladder as cause of abnormal mass even after menopause.

VID 06 – 03

Laparoscopic partial cystectomy guided by real-time cystoscopic visualization

Mohankumar, Shashikant Mishra, Jitendra Jagtap, Arvind P. Ganpule, Ravindra B. Sabnis, Mahesh Desai

Muljibhai Patel Urological Hospital, Nadiad
Uro Oncology

Introduction: Laparoscopic partial cystectomy is limited to solitary tumors in bladder (bladder endometriosis, pheochromocytoma, leiomyoma, squamous cell, adenocarcinoma and transitional cell carcinoma) where a sufficient margin is obtainable. The tumor should be distant both from the bladder neck and trigone as well to allow adequate resected margin (1-2 cm). **Aim:** In this video we present the technique of laparoscopic partial cystectomy guided by real-time cystoscopic visualization. **Material and methods:** In video we present 69 years old male patient with history of painless gross hematuria since one month on evaluation found to have lobulated 4 x 3 cm bladder mass lesion on anterosuperior bladder wall confirmed to be adenocarcinoma on cystoscopy and TURBT. Partial cystectomy was performed in steep Trendelenburg position with standard 4 ports (two 12 mm and two 5mm) were placed. Simultaneous cystoscopy and laparoscopy were done to score the proposed margins accurately. A real-time dual video feed on the same monitor was provided to assist the markings. Both direct visualization and trans specimen immediately placed in Nadiad bag. **Results:** Total operative time was 170 min with a blood loss of 50 cc with total hospital stay of 4 days. Final histology reported adenocarcinoma, negative surgical margins and 20 lymph nodes free of tumor (pT2N0). Foleys was removed on 6th POD. There were no intra operative or post-operative (3 months) complications. **Conclusion:** Simultaneous cystoscopic visualization during laparoscopic partial cystectomy is safe and facilitates dissection to achieve negative surgical margins without increasing any additional morbidity or operative time.

VID 06 – 04

Initial experience of transperitoneal laparoscopic assisted radical nephroureterectomy and excision of bladder cuff with lymphadenectomy for upper tract transitional carcinoma – oncologic outcome and operative safety

Sharma Rakesh M, Patnaik SC, Rao TS

Basavatarakam Indo-American Cancer Hospital & Research Institute,
Hyderabad
Uro Oncology

INTRODUCTION AND OBJECTIVE: To evaluate the safety of Transperitoneal laparoscopic Assisted Radical nephroureterectomy (TrLARNU) and excision of bladder cuff with lymphadenectomy for Upper Tract TCC (UTTCC), addressing the issue of risk factors for complications and open conversion, and to assess the oncologic outcome **METHODS:** The data of 6 patients undergoing LARNU and excision of bladder cuff with lymphadenectomy for UTTCC enrolled from August 2013 to July 2014 at our center were reviewed prospectively. Transperitoneal LARNU and distal ureterectomy with excision of bladder cuff was performed through a lower abdominal transverse incision. Operative time, total blood loss, complications, operative conversions, oncologic outcomes were analyzed. **RESULTS:** Average operative time was 240 minutes, and blood loss was 200 ml. Early

post-operative recovery was noted compared to Open RNU and bladder cuff excision. No patient required post-operative blood transfusion. No patient had complications, re-exploration post-operatively. No patient required open conversion for the Nephrectomy part. All patients underwent lymphadenectomy with an average of 6 lymph nodes dissected. Limitations of this study were its small number and its relatively short follow-up period for oncologic outcome. CONCLUSION: Transperitoneal LARNU and excision of bladder cuff with lymphadenectomy for UTCC is a safe operation.

VID 06 – 05

Early Unclamping of renal hilum during robot assisted right partial nephrectomy: Surgical Video documentary

Jain S, Gautam G, Suryavanshi M, Khera R, Ghosh P, Ahlawat R.

Medanta - The Medicity, Gurgaon
Uro Oncology

OBJECTIVE Duration of warm ischemia is the most important modifiable risk factor during partial nephrectomy 1. Early unclamping of the renal hilum has been shown to drastically reduce warm ischemia time during laparoscopic partial nephrectomy 2. Furthermore, robotic assistance has shown promise for maintaining it within 25–30 min 3. We present a video on the technique of robot assisted partial nephrectomy with early unclamping of renal hilum. **METHODS** A 26/M was incidentally detected with a right lower polar renal mass (4.5 x 3.5cm, T1bN0M0, RENAL Nephrometry score - 9x), with single renal artery and vein. After right ureteric catheterization, patient was placed in left lateral position. After tumor excision, pelviccalyceal system repair and inner layer renorrhaphy was done using V-loc sutures. Renal hilum was unclamped at this stage and the bleeding vessels were sutured using figure of 8, polydioxanone 3-0 sutures. Outer layer renorrhaphy was done with Vicryl no. 1 suture after complete haemostasis. **RESULTS** Warm ischemia time was 20minutes and intraoperative blood loss was 200ml. Foleys catheter and ureteric catheter were removed after 48 hrs and drain was removed after 72 hrs. Histopathology report revealed pT1b pNx pMx, Fuhrman grade II, Chromophobe renal cell carcinoma . **CONCLUSIONS** Early unclamping of the renal hilum during robot assisted partial nephrectomy permits reduction of warm ischemia time even in technically difficult situations with a possible consequent improvement in renal function preservation.

VID 06 – 06

Complete laparoscopic approach for upper tract transitional cell carcinoma

Mohankumar, Shashikant Mishra, Arvind P. Ganpule, Ravindra B. Sabnis, Mahesh Desai

Muljibhai Patel Urological Hospital, Nadiad
Uro Oncology

Introduction: Laparoscopic nephroureterectomy and removal of bladder cuff can be done with either open or endoscopic or complete laparoscopic approach. Complete laparoscopic approach is technically challenging. However with certain modifications, the steep learning curve can be reduced maintaining oncological efficacy **Aim:** In this video we describe our suggested modifications of doing complete laparoscopic nephroureterectomy with bladder cuff removal **Material and methods:** This video highlights our technique of doing laparoscopic nephroureterectomy The essential points of steps include 1. completing the nephroureterectomy and bladder cuff excision in two separate positions 2. Port placement according to site selection which would be common for both the nephroureterectomy and bladder cuff excision with no new ports 3. Adjuncts to be used for minimizing number of ports during bladder cuff excision like silk on straight needle **Results:** In a total number of 15 patients the mean operative time was 187 min with a hemoglobin drop of 1.6 gm with total hospital stay of 4 days. The PUC removal was after an average of 6.2 days. There were no intra operative or post-operative (3 months) complications. **Conclusion:** Complete laparoscopic approach for upper tract TCC is a safe approach with less morbidity. The number of ports can be reduced by the above mentioned technique

VID 06 – 07

Percutaneous nephrolithotomy (PNL) in a patient of indiana pouch with renal stones : A technical challenge

Durga Prasad Bendapudi, Ankur Mittal, Harbhupinder Singh Sandhu, Sudheer K Devana, SK Singh

PGIMER, Chandigarh
Urolithiasis

Introduction: Mechanism of renal stone formation in patients with urinary diversion is due to metabolic abnormalities, UTI, stasis of urine or presence of foreign body. Ureteric catheterization for PNL in these cases is difficult. Reflux of mucus into the kidney as a probable cause of stone formation and their management issues were highlighted in this video. **Case report:** A 64 year male who underwent radical cystectomy and Indiana pouch in 2004 presented after 10 years with multiple pouch calculi and right upper ureteric calculus with central lucency on imaging. His serum creatinine was 2.6 mg% and pouchogram revealed grade IV reflux on right side. Right percutaneous nephrostomy was placed and patient underwent percutaneous removal of pouch stones and PNL. 22Fr cystoscope was passed through the catheterizing stoma and needle puncture of the pouch and tract dilatation was done under endoscopic vision. Both the ureteric orifices were localized as the urothelium appeared distinct from the adjacent enteric mucosa and betadine saline instilled through the right PCN was seen effluxing from the orifice. 6 Fr ureteric catheter was passed over the guidewire and patient underwent PNL through superior calyceal puncture. Soft stones with central mucus were removed. **Conclusion:** Morphologically similar stones in the pouch and kidney highlights the probability of refluxing mucus acting as nidus for stone formation emphasizing the importance of nonrefluxing anastomosis in CCD. Localization of ureteric orifices and retrograde catheterization during PNL in patients with CCD is difficult but possible.

MODERATED POSTER SESSIONS

MP 01 – 01

Rare adrenal gland emergencies: A 2 case series of Giant Myelolipoma with massive hemorrhage and abscess as rarest presentation

Kalpesh Parmar, Santosh Kumar, Jayant Kumar

PGIMER, Chandigarh

INTRODUCTION : Adrenal Myelolipoma is a rare benign neoplasm composed of mature adipose tissue and variable amount of haematopoietic element arising from adrenal cortex. Incidence is 0.05-0.2% accounting for 2.5-5% of adrenal incidentalomas. Usually unilateral and rarely arise from extra adrenal sites like retroperitoneum, thorax and pelvis. Most lesions are small and asymptomatic, discovered incidentally during autopsy or on imaging studies performed for other reasons. **CASE REPORT :** We are reporting a series of two cases of giant myelolipomas of the adrenal gland; (1) A 40 year male presented with pain abdomen with severe anaemia and shock. After resuscitation and stabilization, he was found to have giant right suprarenal mass 30 x 15 cm which was excised. Final histopathology reported adrenal myelolipoma. Postoperative recovery was uneventful and on follow up patient is doing well. (2) A 50 year diabetic male presented with fever with chills, vomiting and pain abdomen. Patient was tachypnoeic and TLC was 22000/mm³. Patient was started on IV antibiotics and investigation revealed huge right suprarenal mass. After stabilization, intraliesional pus was drained and mass excised. Histopathology reported adrenal myelolipoma composed of mature adipose tissue, fibroblast and focally hematopoietic cells. Post operative recovery was uneventful and follow up shows no recurrence. **Conclusion :** Adrenal myelolipoma are benign lesions with no recognized malignant potential. However large tumors are life threatening with risk of recurrent retroperitoneal hemorrhage. Close monitoring and consideration of timely surgical intervention is essential to avoid catastrophies.

MP 01 – 02

Perioperati management of cushing's syndrome with hyperhomocysteinemia - case report

PVLN Murthy, Srinivas, Ravindra Reddy, Rahul Devraj,

Vidyasagar, Ramreddy

Nizam's Institute of Medical Sciences, Hyderabad

Perioperative management of a case of adrenalectomy in a patient with two major metabolic disorders whose systemic effects either compliment or contradict each other is a challenge to the surgical team. A 25yr old male patient with cushing's syndrome and known hypercysteinemia was scheduled for open adrenalectomy. Both these disorders compound the hypercoagulable state and differ in glucose metabolism. In addition, obesity, difficult airway, electrolyte and metabolic derangements that accompany Cushing's syndrome warranted special attention. He was on anticoagulant therapy and IVC filter following an episode of pulmonary thromboembolism with deep vein thrombosis. Perioperative hydrocortisone was administered. Standard general anesthesia was administered without nitrous oxide. Patient was extubated following an uneventful adrenalectomy procedure and discharged home on 10th postoperative day. Understanding the pathophysiological interactions of multiple metabolic disorders, the anesthetic implication with a potential for multisystem involvement is a key to the successful management of these patients.

MP 01 – 03**Malignant mesothelioma of testis: Case reports****Amith Chandra KM, Fredrick Paul , Sathish Kumar, Suresh Bhat**

Medical College Kottayam

INTRODUCTION The malignant mesothelioma of the testis is a very rare malignancy with only less than 150 cases reported in the literature. They can occur in any age group from newborn to 70. This is a report of three cases of this malignancy in patients aged 8 years, 24 years and 65 years. **CASES:** Case .1: 8 year old boy presenting with enlarging left hydrocele and a firm mass palpable. Serum testicular markers were normal. USG: showing hypo echoic hydrocele with heterogeneous masses of increased echogenicity. On exploration there was diffuse thickening of the tunica vaginalis and high inguinal orchidectomy was done. HPR: pure epithelial variant of malignant mesothelioma of tunica vaginalis. Case.2: 24 year old male with 5 months history of painless scrotal swelling, on examination firm nodule in the right scrotal sac. USG: heterogeneous masses of increased echogenicity . Inguinal exploration and high inguinal orchidectomy was done. HPR: biphasic histological variant of malignant mesothelioma tunica vaginalis. Case.3: 55 year male with left testicular swelling 2 years duration. Left testicular biopsy report came as embryonal carcinoma, CD30 positive. 5 cycles of neo adjuvant chemotherapy was given. CECT features suggestive of left testicular neoplasm. High inguinal orchidectomy HPR: malignant paratesticular lesion possibly mesothelioma. **CONCLUSION:** Malignant mesothelioma of the tunica vaginalis is a rare malignancy. They present as asymptomatic scrotal masses and can affect any age groups.

MP 01 – 04**Sexual dysfunction in indian epileptic male population - a prospective study****Dipak Shaw, Pranab Patnaik, VSRathe, Sartaj Khan, Sameer Trivedi, USDwivedi**

Institute of Medical Sciences, Banaras Hindu University, Varanasi

Introduction: EPILEPSY has a negative effect on sexuality. High rates of sexual dysfunction were reported in male patients with epilepsy compared to healthy men. The aim of this prospective study was to analyze the association between Sexual Dysfunction and Epilepsy, study the effects of antiepileptic drugs on Erectile Dysfunction, and evaluate the effect of erectile dysfunction on Quality of life in Indian epileptic men. **Material and methods:** For the purpose of recruitment of patients in this study, 791 epileptic men (age 20-60 years), were screened by a thorough history and questionnaires. Five hundred men with epilepsy were recruited in the study. For evaluating their sexual function two questionnaires were used: International index of Erectile Function-15 and Sexual self efficacy scale for erectile functioning. For evaluating the quality of life "WHO Quality of Life-Brief version" was used. **Results:** This prospective case control study was conducted in Department of Urology in collaboration with Department of Neurology from July 2012-2014. Sexual dysfunction was found in 31.6% (250/791) of epileptic men. The four domains covering

physical and psychological health, social relationships and environmental aspects showed no statistically significant difference. There was statistically significant difference between cases and controls for the oxcarbazepine drug while for other drugs the difference was statistically insignificant. **Conclusion:** Apart from conditions like Hypertension and Diabetes Mellitus, Epilepsy also affects the sexual function of men. Epilepsy causes decrease sexual desire, loss of libido and hampers overall sexual experience of men but sexual dysfunction does not affect the quality of life and health of epileptic men.

MP 01 – 05**Ch.myeloid leukaemia presenting with priapism-An uncommon condition****Jayadeva Sinha**

Saraswati Nursing Home & Stone Clinic, Gaya

Male aged 30 yrs presented with f/s/o priapism of 2 days duration .primary t/t failed to relieve him of the same.on 2nd day,on repeat clinical examinatin, pt was found to have mod. Splenomegaly.on total & differential count of wbc,it turned out to be full flaged case of ch.myeloid leukaemia. Pt.referred to medical oncologist. **Conclusion-such presentation is uncommon but must be kept in mind while treating a case of priapism lest it should be missed.**

MP 01 – 06**Role of primary urinary diversion in ischemic priapism; a new thought process****Sanman KN, Shetty Ranjit, Prabhu Laxman GG, Gurucharan, Venugopal P**

Kasturba Medical College, Mangalore

Introduction and Objective: Ischemic priapism is one the rare but emergency clinical entity encountered in clinical practice. Here by we present 3 cases of ischemic priapism, managed surgically but with new thought process, adding on to the existing, described standard procedures. **Material and Methods:** 2 patients presented with priapism to be diagnosed subsequently as chronic myeloid leukemia and other patient was a peripheral vascular disease patient on anti coagulants. All three presented after 24 hours and all were treated with Burnett(modified Al-Ghorab's) procedure. First patient had optimum size perurethral catheter post operatively. Second patient's perurethral catheter had to be changed to smaller size catheter, due to persistent pain at urethral meatus in post operative period. Third patient underwent primary urinary diversion by SPC (supra pubic cystostomy). **Results:** Time taken for the resolution of priapism was: 1) 48 hours for first case, 2) 24 hours for second case and < 4 hours for third case. Also patient with primary urinary diversion retained erectile function. **Discussion:** Physiologic basis-shunt surgeries create communication between corporal bodies and corpora spongiosa, via which blood flow gets diverted. During this diversion spongiosal vessels get distended temporarily, owing to additional blood flow, and consequently urethral lumen gets narrowed, since peripheral distention is limited by presence of Buck fascia. Presence of perurethral catheter can impede the blood flow though spongiosa, due to inability of blood vessels to distend. **Conclusion :** Primary and temporary urinary diversion in addition to primary procedure helps in early resolution of priapism and might preserve erectile function.

MP 01 – 07**Sexual function following urethroplasty - An audit****Srinivasan Gurumurthy, Nayak P, Chowdhury P, Abdul M, Philipraj J**

Mahatma Gandhi Medical College and Research Institute, Pondicherry

Introduction and Objectives: Urethroplasty has emerged as a front-runner in urethral stricture management armamentarium. Multiple studies have evaluated the change in sexual function following urethroplasty and have shown conflicting results. This study aims to assess erectile function following anastomotic and substitution urethroplasty. **Methods:** The study was conducted over a period of 2 years, in a tertiary care centre with an

experience in management of Urethral Stricture Disease. 32 patients with USD who underwent urethroplasty were assessed and evaluated for erectile function by use of the IIEF-5 (International Index for Erectile Function) questionnaire method. Results: Of the 32 patients who underwent urethroplasty (22 substitution and 10 anastomotic), there was a significant fall in IIEF score in about 44% of patients, unchanged in 50% of patients and increased in 6% at post-operative day 28. Of the 44% of patients with a worsened IIEF-5 score, about 80% had recovery to pre-operative scores by 6 months. There was however, no co-relation between the status of the bulbar artery preservation and erectile function. None of the patients had any significant chordae. Ejaculatory function was not assessed in the present study. Conclusion: Buccal Mucosal Graft substitution urethroplasty is an effective management modality for management of USD with a high success rate but has a significant early effect on the erectile function. However, the sexual function shows considerable recovery on long-term follow-up.

MP 01 – 08

Study of safety and efficacy of tadalafil and its comparison with tamsulosin in treatment of double-j stent related lower urinary symptoms

Aggarwal SP, Tomar V, Yadav SS, Priyadarshi S, Vyas N, Agarwal N

SMS Hospital, Jaipur

INTRODUCTION & OBJECTIVES: To evaluate effects of Tadalafil and compare it with Tamsulosin on DJ related LUTS. **METHODS:** We conducted double blind placebo controlled randomized prospective study in which 68 patients who underwent urological surgery with DJ insertion from February 2014 to June 2014 were divided into 3 groups. 1st Group (22 patients) were put on Tab Tadalafil 5 mg OD, 2nd Group (18 patients) were put on Tab Tamsulosin 10mg OD & 3rd Group (24 patients) were put on placebo for 3 weeks. All patients completed a validated Ureteral Stent Symptom Questionnaire (USSQ) at 3rd week before removal of DJ stent. **RESULTS:** 4 patients were excluded from study. The mean urinary symptom index was 21.5±4.6 in Group 1, 21.8±4.2 in Group 2 & 29±6.4 in Group 3. The mean pain score was 7.1±3.1 in group 1, 13.1±3.9 in group 2 & 16±5.1 in group 3. The mean sexual performance score was 2.9±.5 in Group 1, 3.9±1.6 in group 2 and 4.2±2.1 in group 3. No significant difference in general health and overall performance status. **CONCLUSION:** Tadalafil is effective in relieving DJ related urinary symptoms comparable to Tamsulosin, but more effective in relieving body pain & sexual symptoms.

MP 01 – 09

Safety of 12 core transrectal ultrasound guided prostate biopsy in patients on aspirin

Harbinder Singh, Pawan Vasudeva, Anup Kumar, Gaurav Kumar, Sanjeev Jha, Rohit Kumar

VMMC & Safdarganj Hospital, New Delhi

Growing life expectancy and resultant ageing population, along with increasing awareness and use of serum prostate specific antigen (PSA) for prostate cancer screening led to increase in transrectal ultrasound (TRUS) guided prostate biopsy, a gold standard procedure for histopathological diagnosis of prostate cancer, in urological practice. [1-3] 10-12 systematic cores for initial diagnosis have been suggested by European association of urology (EAU) 2014 guidelines (level of evidence 2a, grade of recommendation B). [4] A high proportion of patients requiring TRUS guided prostate biopsy for diagnosis of prostate cancer are on medications like aspirin, warfarin, etc for associated co-morbidities. [3] With 12 core TRUS guided prostate biopsy, although minor and self limiting, hemorrhagic complications like hematuria, hematospermia and rectal bleeding was reported in 33-39%, 12-36% and 14-27%, respectively. [3,5-6] The literature regarding TRUS guided prostate biopsy in aspirin user report variable results, some observed no difference in bleeding complications, while others reported increase in minor bleeding complications. [1,6-8] In this study, we intended to prospectively assess safety outcome of TRUS guided prostate biopsy in low dose aspirin user and found that Continuing aspirin during TRUS guided prostate biopsy neither alters the minor bleeding episodes nor it causes major bleeding complication. So, discontinuation of aspirin prior to TRUS guided prostate biopsy is not required

MP 01 – 10

Obstructive Anuria – A study of 45 cases

Sankapal P, Talwadker NB, Chari PD, Dias B, Prabhudessai MR, Thatte SW

Goa Medical College

INTRODUCTION AND OBJECTIVE:: Obstructive anuria, though uncommon, is a life threatening urological emergency requiring multidisciplinary approach as early as possible, for a successful outcome. Our aim was to study etiology and different modes to relieve obstruction, with regards to time of intervention and outcome. **MATERIALS AND METHODS:** 45 patients with obstructive anuria who presented to Goa Medical College from April 2010 to April 2014 were included in the study and analysed with regard to etiology, clinical presentation, investigation and management. Patients known to have CKD were excluded from the study. **RESULTS:** Of 45 patients, the commonest cause was Ureteric/PUJ calculi (30/45) followed by pelvic malignancies (13/45) and retroperitoneal fibrosis (2/45). 20 patients presented with renal colic and 13 with sepsis of which 8 were in shock. 10 patients presented with uremia and acidosis while 2 had uremic encephalopathy. 26 patients presented after 48 hours of anuria. All patients with uremia were dialysed 2 to 3 times prior to intervention. 26 patients underwent DJ stenting while percutaneous nephrostomy (PCN) was done in the rest. 34 patients had post obstructive diuresis with 29 of them showing normal creatinine level on 10th post intervention day. 14/45 developed CKD of which 3 required maintenance dialysis. 4/45 patients died. **CONCLUSION:** Urolithiasis was the major cause of obstructive anuria. Pre intervention dialysis and correction of acidosis in uremic patients improves outcome. PCN is preferred in critically ill patients and pelvic malignancies while DJ stenting is preferred in patients with calculi.

MP 01 – 11

Expression of matrix metalloproteinase- 9 (MMP-9) and tissue inhibitor of metalloproteinase-1 (TIMP- 1) in urothelial cancer of urinary bladder and their correlation with stage & grade

Uttam Mete, Pushkarna Arawat, Ankur Mittal, Saikia Uma, Saikia Biman, Kakkar Nandita, Mandal Arup

PGIMER, Chandigarh

Introduction: Matrix metalloproteinases (MMPs) are a family of proteolytic enzymes which degrade the extracellular matrix or components of the basement membrane and are responsible for tumour progression. Tissue inhibitors of matrix metalloproteinases (TIMPs) take part in the regulation of MMPs. We evaluated the expression of MMP-9 & TIMP -1 in the tumour tissues and measured their urinary concentration amongst patients with urothelial carcinoma (UC) of the urinary bladder. We also tried to find out the correlation of these molecular markers and standard clinical & histological parameters for tumor recurrence and progression e.g. stage & grade. **Methods:** Fifteen Patients with Non muscle invasive bladder cancer (NMIBC Group- I) and fifteen Patients with muscle invasive bladder cancer (MIBC group-II) were enrolled. Voided urine samples were assayed for MMP9 & TIMP1 by commercially available enzyme linked immunosorbent assay (ELISA). The tumour tissue obtained following transurethral resection (TURBT) or radical cystectomy was subjected to routine histopathological testing. MMP-9 and TIMP-1 expression was done using immunohistochemistry (source: NOVACASTLE, USA). The staining positivity was graded as: 0 = no staining, 1(+) = weak positivity < 25% cells positive, 2(++) = moderate positivity 25 -50% cells positive, 3(+++) = strong positivity > 50% cells positive. **Results:** In group I 14 patients (93.37%) had low grade cancer, 1 (6.67%) had high grade lesion. In group II 100% patients had high grade lesion. We found expression of MMP-9 in 86.67% of NMIBC patients and 93.33% of MIBC patients. All patients (100%) in NMIBC group stained positively for TIMP-1 while 93.33% of MIBC patients stained positively for TIMP-1. In the NMIBC group, median Urine MMP-9 value was 1550 pg/ml while median MMP-9 value in MIBC group was 6000pg/ml. This difference was statistically significant (p= 0.034). Median urine TIMP-1 value in the NMIBC group was 1700pg/ml and that in MIBC group was 2250pg/ml and this difference was not statistically significant (p=1.00). Urinary levels of MMP-9 and TIMP-1 correlated with their tissue expression. **Conclusion:** There was no correlation between the level

of expression of both these enzymes with stage T1 & T2 of the disease. This suggests that these tumors are similar at the molecular level and have similar potential for aggressiveness. Hence T1 tumors should be regarded as potentially aggressive based on their similar molecular behavior to the T2 tumors and thereby needing more aggressive therapy. Urinary levels of MMP-9 and TIMP-1 correlated with the expression of the respective enzymes in the tumor tissues and hence may be used as surrogate markers of their tissue expression.

MP 01 – 12

To Study The Outcomes of Medical Management in Patients of Benign Prostatic Hyperplasia

Amit Kumar Shah, Karan SC, Talwar R, Srivastava A

Army Hospital (R&R), New Delhi

Introduction As demographics change, with the elderly constituting an increasing proportion of the population, management of lower urinary tract symptoms (LUTS) secondary to benign prostatic hyperplasia (BPH) is an upcoming challenge, especially with management showing a paradigm shift towards medical management. **Materials & Methods** A total of 170 patients were enrolled (Excluding 51) and their complete profile with clinical, imaging and IPSS details were taken as per Performa and were followed up while on medical management and assessed on a cross section basis. **Results** The mean age in the study group was 64.61 years. We recorded that all subjects had some formal education. These patients were prescribed α 1a Blockers as monotherapy or combination therapy as per the protocol of the study. They showed improvement while on medical management with significant outcomes on IPSS, QoL, Uroflowmetry, and Voiding time. Adverse reactions of medical management was not significant for discontinuation of therapy. On persistence of Overactive Bladder (OAB) symptoms, anticholinergics were prescribed for 12 weeks which had a significant positive outcome. 41 patients out of 170 underwent surgery for no response or worsening QoL. This group was further analysed which revealed that Co morbid condition, Prostate size and BMI had no association with the outcome. Failure of medical management was usually ascertained by patient on IPSS Score and deteriorating QoL and these patient had Qmax and Qav predicting BOO with raised PVR. **Conclusion** Medical therapy for BPH has evolved along with our understanding of the underlying pathophysiology of the disease. Recent data analysis suggests that optimal management of BPH progression in men with very small prostates at baseline can be achieved with α -blocker therapy alone, whereas combination therapy is more effective in patients with larger prostates. Ultimately, patients will change to another therapy if they perceive a lack of benefit or improvement of their lower urinary tract symptoms, intolerable side effects, or progression of disease.

MP 01 – 13

Role of Dutasteride in reducing TURP complication

Antan Uresh Kumar T, K Thiyagarajan, RKarunamoorthy, Chengalvarayan, JVS Prakash, Vedachalam, Velavendan

Madras Medical College, Chennai

The primary aim and objective of the present study is to determine whether preoperative treatment with Dutasteride decreases surgical blood loss in patients who undergo transurethral resection of the prostate for benign prostatic hyperplasia with prostate >30cc volume with acute urinary retention. The secondary objective is to assess the postoperative complication like clot retention, blood transfusion, failure to void after the catheter removal and the urinary tract infection in post operative period. **CONCLUSION** 1. The present study shows two weeks preoperative Dutasteride 0.5 mg BD treatment in BPH will reduce the microvessel density in suburethral portion of prostatic urothelium. 2. Preoperative Dutasteride will be helpful for the larger amount of prostatic tissue resection in lesser time. 3. Even though the preoperative Haemoglobin and PCV were not significantly different from postoperative Hb/PCV, Dutasteride cause clot retention and blood transfusion in lesser number of post TURP patients. 4. When the Dutasteride is compared with Finasteride in reducing the TURP complication, it has efficacy almost similar to the Finasteride. Preoperative Dutasteride will reduce the TURP complication in BPH as Finasteride but needs further large randomized trials to confirm the efficacy with better statistically significant difference.

MP 01 – 14

Medical versus surgical management of benign prostatic hyperplasia – an open label randomized controlled trial

Doreswamy K, Karthikeyan VS, Ratkal CS

Institute of Nephrology, Victoria Hospital Campus, Bangalore

Introduction and Objective: BPH has a varied spectrum of presentation ranging from irritative LUTS to renal failure and hematuria. Though absolute indications for surgery exist, knowledge regarding effectiveness of surgery in patients amenable to medical treatment is lacking. **Methods:** Patients (100 in each arm) of BPH fit for medical management were randomised to receive drugs (Group M) or undergo TURP (Group S). Subjective assessment (IPSS), objective assessment with uroflowmetry (Qmax) and assessment of complications in both arms were done at presentation and at 1, 4, 12 and 24 weeks after treatment during the study period (2013-2014). **Results:** Median (\pm IQR) IPSS at pre-treatment, 1, 4, 12 and 24 weeks in Group M was 19 ± 4.5 , 15 ± 4.5 , 10 ± 3.75 , 10 ± 3 and 7 ± 1.75 ($p=0.000$) and in Group S was 21 ± 4 , 9 ± 3.5 , 6 ± 2 , 5 ± 1.5 and 5 ± 1.5 ($p=0.000$). Mean (\pm SD) Qmax at pre-treatment, 1, 4, 12 and 24 weeks in Group M was 11.2 ± 3 , 12.76 ± 2.7 , 14.5 ± 3.5 , 15 ± 3.7 and 16 ± 3.6 ($p=0.000$) and in Group S was 8.3 ± 4.8 , 13.8 ± 7.6 , 20.9 ± 11.5 , 16.3 ± 6.6 and 14.2 ± 5.2 ml/sec ($p=0.000$). IPSS was significantly lower in Group S at all intervals ($p=0.000$) and Qmax was significantly improved in Group S at 4 ($p=0.008$) and 24 weeks ($p=0.001$). **Conclusion:** TURP offers better improvement in LUTS subjectively and objectively and can be considered as first line treatment even in patients fit for medical treatment.

MP 01 – 15

Comparison of safety endpoints in Transurethral Resection of Prostate and Holmium Laser Enucleation of Prostate

Fusakele Ankit, Suribabu A, Reddy VV

Yashoda Hospital Secunderabad

OBJECTIVE: We conducted this study to compare the safety of monopolar trans urethral resection of prostate (TURP) and Holmium laser enucleation of prostate (HoLEP) in early post operative period. **MATERIAL AND METHODS:** This is a single center, prospective, randomized control study, with sample of 100 patients, from June 2013 to May 2014 operated for symptomatic BPH, divided in two groups each of 50. The safety end points studied were the occurrence of postoperative complications and the changes in the preoperative and immediate postoperative serum electrolyte (sodium, potassium, chloride) haemoglobin (Hb) levels, haematocrit, and serum osmolarity. **RESULT:** Pre operative parameters were comparable in two groups. Decline of mean Hb in TURP group was significantly more than HoLEP group (1.28 ± 0.89 vs. 0.87 ± 0.54 ; $p=0.029$). Decline of mean S. Na (3.80 ± 1.41 vs. 1.90 ± 1.10 ; $p=0.258$) & S. Cl (2.34 ± 2.11 vs. 1.46 ± 2.19 ; $p=0.149$) was more but not significant in TURP group. Duration of catheterization (2.36 ± 0.66 vs. 2.12 ± 0.38 ; $p=0.029$) and hospital stay (3.36 ± 0.66 vs. 3.12 ± 0.38 ; $p=0.029$) was significantly longer in TURP group. None of patient required blood transfusion or change of catheter. **RESULT:** HoLEP is safe in perioperative period for management of BPH, with advantage of reduced intraoperative hemorrhage and perioperative morbidity.

MP 02 – 01

Comparative study of bipolar TURP with monopolar TURP - retrospective analysis

Goutham Gopinath, Remya

Pariyaram Medical College, Kannur, Kerala

INTRODUCTION AND OBJECTIVE : To compare bipolar with standard monopolar transurethral resection of the prostate (TURP). **METHODS:** We retrospectively analysed all patients who underwent TURP at between Jan 2012 and Dec 2013. We made two groups of monopolar TURP and Bipolar TURP. We studied the following parameters, efficacy (maximum flow rate [Qmax], International Prostate Symptom Score) safety (adverse events, decline in postoperative serum sodium [Na+] and haemoglobin [Hb] levels) operative performance (operative time, resected prostate). All Patients were followed up for minimum of 6 months. **RESULTS** 120 patients had undergone TURP and included in the study, with 78 patients

in the monopolar TURP group and 42 in the Bipolar group. The IPSS and Qmax improvements were comparable between the two groups at 6 months of follow-up. Declines in the mean postoperative serum Na⁺ for bipolar and monopolar TURP groups were 1.2 and 8.7mmol/L, respectively. However, there was no statistical difference in the decline in postoperative Hb between the two groups. Operative time was slightly higher for bipolar TURP compared to monopolar. Adverse events were higher in monopolar compared to bipolar. Bleeding requiring transfusion was slightly higher in bipolar, whereas as other complications were lower in bipolar group. CONCLUSION : Bipolar TURP is as effective as Monopolar TURP with comparable outcome and favourable adverse event rates.

MP 02 – 02

Risk factors predicting renal failure in benign prostatic hyperplasia

Patodia Madhusudan, Sankhwar Satyanarayan, Goel Apul, Singh Vishvajeet, Singh BP, Kumar Manoj, Singh Manmeet

King George's Medical College, Lucknow

INTRODUCTION BPH is a highly prevalent disorder that affects more than 50% of men older than 65 years and renal dysfunction is a well-described complication of BPH. In the present study, we evaluated risk factors predicting renal failure in BPH. **MATERIAL AND METHOD** This was retrospective study done between July 2011 to January 2014. 364 consecutive patients (aged 45 years or older) who presented with lower urinary tract symptoms secondary to BPH were included in this study. Every patient was evaluated by duration of symptoms, prostate size, prevoid capacity, post void residual urine, bladder wall thickness, serum creatinine, IPSS score, presence of diabetes mellitus and/or hypertension and uroflowmetry. **RESULT** A total of 364 patients were enrolled in the study. Out of these, 54 patients were found to have S. Creatinine greater than 1.4 mg/dl (group A) and 310 patients have S. Creatinine less than 1.4 mg/dl (group B). High PVRU (>100 ml) was present in 32/54 (59.2%) patients in group A and 12/310 (3.8%) in group B, which was statistically significant (p<0.5). Low urinary flow rate (<15 ml/sec) was significantly associated with renal failure (P<0.5). Duration of symptoms, IPSS score, prostate size were not found significant. **CONCLUSION** This study concluded that low urinary flow rate and PVRU >100ml appears to be associated with increased serum creatinine in men with BPH.

MP 02 – 03

Diode laser prostate vaporisation in patients on antiplatelet agents

Premkumar K, Mohan Keshavamurthy, Shakir Tabrez, Sreeharsha Harinath, Karbasavaraj Neelagar

Fortis Hospital, Bangalore

Background:TURP has been a gold standard for BPH from the time it proved its success over the open prostatectomy. One of the major drawbacks of TURP is the intra op and post op bleeding and the related morbidity and mortality. Diode LASER vaporisation of the prostate has come in a big way since its introduction in 2009. DIODE LASER vaporisation has been boasted with no risk of intra or post operative bleeding even in patients on antiplatelet medications. **Material and methods:**Patients on antiplatelets which could not be safely stopped and in need for TURP are considered under the study. The study duration is from 2011 January and on going. **Results:**Patients who were on antiplatelets in the perioperative period were treated with DIODE LASER TUVP. We came across very low incidence of bleeding in the post operative period and very low incidence of intra op bleeding and none required blood transfusion in either situations. **Conclusion:** DIODE LASER TUVP is a safe procedure for treating patients with BPH on antiplatelet agents.

MP 02 – 04

Men with lower urinary tract symptoms (LUTS); Is there a correlation between testosterone and PSA?

Raman Tanwar, Nikhil Khattar, Rajeev Sood

PGIMER and Dr. RML Hospital, New Delhi

Introduction: Relationship between testosterone and prostate specific

antigen (PSA) in patients with LUTS is ambiguous. Earlier studies to establish the correlation have been plagued by small sample sizes and variable results have only fueled the controversy. Need of a larger study has been realized in literature. **Methods:** A retrospective study was done over a period of 6 years at a tertiary care centre based on data of 9782 patients who presented with LUTS. Free and total Prostate Specific Antigen were correlated with age, prostate volume and free and total Testosterone using appropriate statistical tests in 2328 patients. Patients were stratified into two groups based on PSA level of 2.5 ng/ml and correlation was studied separately. **Results:** A large proportion (26.65%) of our study patients were biochemically hypogonadal. A weak negative correlation was found between free PSA and Testosterone levels (-0.086, p < 0.001). No significant correlation was found between total PSA and Testosterone. A weak negative correlation was also found between prostate volume and serum Testosterone (-0.45, p < 0.001) while volume significantly correlated positively with free and total PSA. When groups were independently analysed no significant correlation was found between Testosterone and PSA in the PSA > 2.5 ng/ml group. **Conclusion:** In patients with lower urinary tract symptoms serum testosterone and PSA levels do not seem to be interrelated. The weak association between free PSA, prostate volume and total Testosterone is of little clinical utility. Patients should be interrogated for clinical hypogonadism to improve quality of life.

MP 02 – 05

Impact of advancing age on presentation severity of symptoms and management decision in patients benign prostatic enlargement

Siddharth Kini, Daga SO, Ismail MA, Patwardhan SK

Seth GS Medical College and KEM Hospital, Mumbai

Introduction and Objective: To assess the impact of advancing age on presentation, severity of symptoms' and management decision in patients of BEP. **Methods:** This is a cross-sectional study which including serial adult male patients (n=180) presenting with at LUTS associated with BEP in the OPD of tertiary care hospital. Socio-demographic and clinical variables along with detailed history, complete physical examination with DRE, Sr. PSA, UFR with PVR and USG KUB, TRUS Biopsy, UDS., IPSS score. **Results:** Mean age of patients presenting was 61.8 years. Average duration of symptoms before presentation was 2.84 months. 23.3 % of patients had atleast one episode of AUR. 95% showed moderate or severe symptoms on IPSS. storage symptoms were predominant and nocturia most bothersome complaint Mean PSA score at presentation was 2.52. 17.33% of patients needed surgical management of which 46.15 % were above the age of 70 In the age group above 70 mean AUA score was 18.93, mean PSA was 4.44 and 33.37 % presented with history of AUR with surgical management in 53%. **Discussion:** There was clear correlation between advancing age of the patient and prior retention, increasing PSA levels, mean AUA score and need for surgical management. **Conclusion:** LUTS is an outcome of prostate enlargement, both static and dynamic bladder functions. Advanced age probably adds to bladder compliance overactivity and or loss of detrusor contractility. Patients above 70 years have more possibilities of undergoing surgical management than be happy with medical management at a relatively high risk of undergoing surgery.

MP 02 – 06

Holmium laser enucleation of prostate versus transurethral resection of prostate for large prostate glands (> 60 grams)

Singh Bhupendra P, Jhanwar Ankur, Sharma Kuldeep, Garg Yogesh, Kumar Manoj, Goel Apul, Sankhwar SN

King George's Medical University, Lucknow

Introduction & Objective By ensuring a more complete removal of benign prostatic adenoma in larger prostates, holmium laser enucleation of prostate (HoLEP) may have a potential for better outcomes than transurethral resection of prostate. Aim of present study was to compare objective and subjective outcomes of HoLEP and TURP for large prostate glands (> 60 grams). **Methods** 51 patients of benign prostatic hyperplasia with prostate volume larger than 60 grams were prospectively assigned to either HoLEP (25 patients) and TURP (26 patients) groups between January 2012 and June

2013 in a tertiary care teaching institution. Preoperative data, Perioperative outcomes and postoperative outcomes (at 1, 3 and 12 months) were recorded and compared. The p-value < 0.05 was considered significant. Results Demography and preoperative parameters (age, AUA symptom score, QoL score, Qmax, mean prostate volume, mean haemoglobin level, mean serum creatinine) were similar between HoLEP and TURP groups. Mean operative time and resected volume were significantly higher (< 0.05) in HoLEP group. Mean catheterization time, hospital stay and blood transfusion rate were significantly (p < 0.05) lower in HoLEP group. Transient stress incontinence and urge incontinence were higher in HoLEP group at 1 and 3 months. Mean postoperative Qmax (at 1, 3 and 12 months) was higher in HoLEP group. Overall complications rate, postoperative AUA Symptom scores, postoperative QoL scores were similar (p > 0.05) in both groups. Conclusions For larger prostates (> 60 grams) HoLEP is better than TURP for objective outcomes. Postoperative AUA scores, QoL scores and overall complications rate were similar with both procedures.

MP 02 – 07

Holmium laser enucleation of prostate (HoLEP) versus trans urethral resection of prostate (TURP): A prospective study

Ved Prakash Verma, Singh V, Sankhwar SN, Dalela D, Goel A, Singh BP, Sinha RJ

King George Medical University, Lucknow

Introduction and objective TURP has been the gold standard for BPH for the last 30 years but it is associated with considerable peri-operative morbidity. Therefore, high interest has developed in other minimally invasive surgical techniques. Currently holmium laser prostate enucleation (HoLEP), seems to be an attractive alternative to standard TURP. The aim of present study is to compare HoLEP versus TURP in obstructive benign prostatic hyperplasia. Material and methods A total of 60 patients with obstructive BPH with standard indication of surgery were randomized to TURP or HoLEP. Both procedures were performed by a single surgeon. Pre, intra and post operative parameters were recorded. Patients were followed up at 1 month, 6 months and 12 months post-operatively with uroflowmetry, AUA symptom scores, International Continence Society Short Form Male questionnaire (ICSmale-SF) and the International Index of Erectile Function (IIEF). Result In the HoLEP group mean operative time was significantly higher than for TURP (p < 0.05), while irrigation time, catheterization time and hospital stay were significantly shorter in the HoLEP group. Two patients in HoLEP group and one in TURP developed transient incontinence. The overall complication rate was comparable in the 2 groups. During follow-up both group has comparable significant improvement in flow rate and AUA symptoms score. Erectile function was also maintained in the follow up period from baseline in each group. Conclusion Our study confirms that HoLEP is as effective as TURP in relieving symptom and improving flow rate in BPH with advantages of less intra-operative bleeding and peri-operative morbidity.

MP 02 – 08

Adult Giant Genital Hemangioma & Pure Intrascrotal Hemangioma: A Rare Benign Genital Tumor of Adult

Anoop Kumar Mishra, Tomer V, Yadav SS, Priyadarshi S, Vyas N, Agarwal N

SMS Hospital Jaipur

Adult hemangioma of genital area is infrequent. Presentation and treatment may varied. Etiopathogenesis and diagnostic work up is not clear and remains controversial. Penoscrotal and pure scrotal hemangioma are usually diagnosed in children and very rarely encounter in adult urology practice. A study series of 2 cases of adult giant genital hemangiomas (involving whole scrotum, penis, and part of glans) and single case of pure intrascrotal hemangioma. Age (25, 29, 32) and clinical presentation was variable in all the three cases. History and physical examination was noted. CTangiography and color Doppler has been done to know the extent and nature of lesion. In view of large size, decision was taken in favour of surgical excision and watchful waiting policy have been adopted for glanular lesion. RESULTS: After surgical excision patient had symptomatically improved and swelling

subsided. Lesion of glans was completely disappeared at 3 month of follow up and there were no recurrent lesion at 3-12 month of follow up. CONCLUSIONS: Adult genital hemangioma involving penis, scrotum, and glans are rarely encounter in daily urological practice and its clinical presentation and extension varied. We recommend surgical excision for giant penoscrotal and medium size intrascrotal hemangioma because no recurrence at follow up. We also favour watchful waiting policy for glanular lesion in view of very high chance of spontaneous resolution as happen in our case.

MP 02 – 09

Abdominal leak point pressure a simple way to predict urinary incontinence following surgical treatment of unilateral ectopic ureter in girls: Don't face a distressing situation!

Sureka Sanjoy Kumar, MS Ansari, Rakesh Kapoor

SGPGIMS, Lucknow

Introduction: Stress incontinence (SUI) following surgical management of unilateral (U/L) urinary ectopic ureter (UEU) in girls is a stressful situation. We have evaluated risk factors and role of preoperative abdominal leak point pressure to predict this distressing scenario. Materials: All girls operated for UEU between 2005 to May 2014 has been evaluated retrospectively. History, preoperative imaging (IVP, CECT scan MR urography, MCU), Preoperative cystometrogram or video urodynamics, intra-operative findings, postoperative SUI were assessed. Results: 23 girls were operated for UEU (Orifice at or distal to bladder neck) with mean age of 14.8 ± 4.7 yrs; six underwent nephroureterectomy and 17 had reimplantation. The extent of ureteral dissection was just beyond the uterine artery in 15 and till its insertion in 8. Nine (39.1%, Group A) girls had varying degree of SUI postoperatively and 14 (60.9%, Group B) were dry. Age distribution in Group A and B was 18 ± 4.2 vs 7.2 ± 3.5 years (p = 0.01). Cystometrogram demonstrate abdominal leak point pressure (ALPP) < 60 cm of water in 10 patients (Gr A = 8 vs Gr B = 2, P = 0.001) with mean ALPP of 31.5 ± 8.5. Of nine, four patients were managed with bladder neck reconstruction and two with bulking agents (Macropastique® or Deflux®) and became completely dry. Three patients lost in follow up. Conclusion: 40% girls with unilateral UEU had varying degree of SUI; more common if operated at late adolescent than younger childhood. We recommend pre-operative ALPP in girls with UEU to accurately predict this distressing scenario; the same has an important role in patients counselling.

MP 02 – 10

Impact of irrigant viscosity on stone dust during laser lithotripsy - invitro analysis

Ashish Patil, Yaser Ahmad, Lokesh Patni

Institute of Urology, Dhule

Introduction and objective: Dust generated during stone pulverization with laser impairs endoscopic vision. Dissipation of dust in fluid medium is related to viscosity of medium. We studied impact of viscosity of irrigant on the same. Methods: Invitro hands free bench constructed using fish tank, phantom stone slab, two endoscopes and 800 µ laser fiber (fig 1). Tank was filled with distilled water, normal saline and glycine. Impulse of 800, 2000 and 3000 mj of Holmium laser were delivered to phantom in each media. Volume of dust formed was measured (fig 2 & 3). Radii of circles were in increments of 1 cm from laser fiber tip. This helped to measure maximum radius of laser dust cloud formed during the experiment. SPSS analysis for different energy cohorts was carried out. Results: Quantum of Holmium energy Irrigant Volume of stone dust (cm³) p value (Median (IQR) (compared with water) 800 mj Water 12.60 (10.14-14.57) NA Saline 4.50 (2.93-5.11) < 0.001* Glycine 2.53 (2.00-3.79) 0.007** 2000 mj Water 30.29 (18.74-39.57) NA Saline 13.77 (10.34-13.77) < 0.001* Glycine 3.80 (3.62-5.22) < 0.001** 3000 mj Water 36.99 (34.11-39.57) NA Saline 17.21 (12.93-21.36) < 0.001* Glycine 14.17 (11.09-16.41) 0.09** Conclusion: Viscosity of irrigant fluid is determinant of volume of stone dust formed at all energy levels. Using high viscosity irrigant with low laser power may help curb stone dust formation. Thus manipulating viscosity of irrigant solution may open a new avenue for decreasing the dust cloud formation during stone surgery

MP 02 – 11

Experience of post renal stone surgery hematuria

Kumar Ashish, Rao Niren, Dogra P N, Seth A, Kumar Rajeev, Singh Prabhjot, Saini A K

All India Institute of Medical Sciences, New Delhi

Introduction: Percutaneous nephrolithotomy (PCNL) is the standard of care for large renal calculus with very limited indications for open procedure. Hematuria is one of the common complication following renal stone surgery. The purpose of this study was to review profile of these patients and its management. **Material and methods:** Data of patients who underwent surgery (open or percutaneous) for stone surgery from August 2010 to July 2014 at our institute or referred to our institute in same period with similar complaints were recorded. **Results:** Three hundred fifty patients underwent procedure for renal calculus at our centre with 23 pyelolithotomies and 372 PCNL. Ten of these had persistent hematuria in the post-op period and 15 such patients were referred from other hospitals. The mean age of the 25 patients was 35.92 years (14-74). Twenty patients underwent PCNL (80%), 3 (12%) open pyelolithotomies and 2 (8%) open nephrolithotomies. The mean interval of appearance of hematuria following procedure was 10.48 days(2-90) with a mean hemoglobin of 8.53 mg/dl (3.9-12.8) and serum creatinine of 1.44 mg/dl (0.4-4.9). Each patient underwent with color doppler ultrasonography and digital subtraction angiography or CT angiography if necessary. Of these 25 patients, eight had no demonstrable lesion with a mean of 1.6 units of packed red blood cells transfusion (0-4). Of the remaining 17 patients angiography revealed pseudo-aneurysms in 13 (76.47%), arteriovenous fistula in 3 (17.64 %) and an abnormal blush of vessels in one. These patients underwent super-selective angioembolisation. Three patients underwent repeat angiography (pseudoaneurysm-2 and arteriovenous fistula-1).None required nephrectomy and none had embolization related complication. **Conclusion:** Radiological procedure localises the source of bleeding and timely superselective angioembolisation controls the bleeding and avoids nephrectomy with minimal complication.

MP 02 – 12

Bipolar TURP by Storz, Olympus and Alan Diathermy: Comparison of Performance

PB Singh, Prashant Kumar Singh, Pawan Kesharwani & Jagdeep Balyan

Max Superspeciality Hospital Delhi

Bipolar TURP using normal saline is a new gold standard for management of BPH. It has advantage of technique of TURP by which majority of urologist are accustomed as well as advantage of laser technique using saline and haemostasis. In our hospital BPH is primarily managed by BIPOLAR TURP. In India bipolar diathermy was made available by Olympus and subsequently by Storz. Recently indian manufacturer also introduced diathermy with brand name ALAN. To have experience of all diathermies, we used all and compared performance of each. We compared the performance by observing effectiveness of cutting, coagulation and vaporization using plasma button. We also assessed which working element is more user friendly, size of loops to determine rate of resection, as well as cost effectiveness for urologist. Total 65 patients with BPH underwent bipolar TURP with gland size varying between 30gs to 200gms. All cases were performed by single surgeon. End results in all cases were more or less same. All patients voided with good flow with majority fully continent. There was no difference in out come based on type of diathermy but surgeon's experience in achieving out come with different diathermy was different. Details of comparison will be presented but based on performance of machine we can conclude the performance on sliding scale in decreasing order are Olympus, Alan followed by Storz.

MP 02 – 13

PCNL in radiolucent calculus and its outcomes

Rohit Muvva, Natarajan K, ChandruT

Sri Ramachandra Medical College, Porur, Chennai

We aimed to evaluate the effectiveness of percutaneous nephrolithotomy (PNL), stone-free rates, and related complications in patients with radiolucent renal stones. A total of 30 patients from our institution were enrolled in our study. Asymptomatic clinically insignificant residual fragments measuring

< 4 mm or a complete stone-free status was accepted as the criterion for clinical success. Stone size between 1.5cm to 2cm were included in our study. Major intraoperative complications and additional organ injury were not observed. Postoperative fever was observed during first post PNL day in 3 patients which was relieved spontaneously. In 1 patient stone could not be identified. PNL can be applied to radiolucent renal stones with similar success, and complication rates as noted for radiopaque stones.

MP 02 – 14

Comparative study of lignocaine gel (2%) & liquid paraffin in relieving pain during out patient rigid cystoscopy

Saha Barun, Sharma PK, Mandal SN, Karmakar D

Calcutta National Medical College, Kolkata

INTRODUCTION & OBJECTIVE: Cystoscopy is the most common urological OPD procedure, done with either flexible or rigid cystoscope. Rigid cystoscope has wider vision, larger working channel & widely available. Various studies have evaluated the role of topical lignocaine & the amount & time anaesthetic agent for optimal anesthesia, the results are conflicting . Here, we have assessed the efficacy of lignocaine gelly(2%) & liquid paraffin in relieving pain during rigid cystoscopy. **METHODS:** A randomized, double blind study with 70 patients, divided in two groups, using lignocaine gelly 2% (N=36) or liquid paraffin (N=34), has been performed. Females were not included in this study. Urethra was filled with 10ml of gel either lignocaine or paraffin & waited for 10 min. A separate interpreter has assessed pain score using 10 point visual analog scale . Patients who requested for analgesics & personal preference, whether they would like to do it under general anesthesia were recorded. **RESULTS:** The mean pain score in the lignocaine & liquid paraffin groups were 3.96 ± 1.44 & 3.36 ± 1.37 respectively (P=0.1057). Age& duration of procedure also didn't differ significantly. 7 out of 36(19%) in lignocaine group & 5 out of 34(16%) in paraffin group requested for analgesics & 4 in each group felt that they would prefer it under GA. **CONCLUSION:** Liquid paraffin has comparable pain score & is cheaper, almost 4 times than lignocaine gelly. So, liquid paraffin can be used as an alternative lubricating agent during OPD procedure using rigid cystoscope.

MP 02 – 15

Bilateral staghorn calculi in a post radical cystectomy with ileal conduit patient with forgotten dj stent – a rare urological challenge

Sharma Rakesh, Mitra K Subrata, Dey K Ranjan, Basu Supriya, Das K Ranjit

R G Kar Medical College, Kolkata

Staghorn calculus in forgotten DJ stent patients is not uncommon but bilateral staghorn in post radical cystectomy with ileal conduit patient is very rare and challenging to manage. Here we represent a case of 32 years old man with bilateral staghorn calculi with bilateral forgotten DJ stent. He was operated 6 years back for muscle invasive Ca Bladder and radical cystoprostatectomy with ileal conduit was done . He was lost to follow up just after operation and now he presented with bilateral staghorn calculi with deranged renal function (serum creatinine 2.9 mg/dl). We used minimal invasive techniques [sandwich therapy (PCNL+ ESWL)] to render him stone free. This type of situation though rare in urological practice can still be prevented by maintaining a meticulous data registry. Management is still minimally invasive with successful outcomes in these patients.

MP 03 – 01

Recurrent clot anuria following laparoscopic pyeloplasty in a solitary functioning kidney: managing with SANTOSH- PGI- double guide wire technique

Shivanshu Singh, Kumar Santosh, Garg Nitin, Parmar Kalpesh Mahesh

PGIMER, Chandigarh

Clot anuria in solitary functioning kidney is an emergency situation. Hematuria with clot anuria in an early postoperative period represents

a challenge, as treatment options are limited. Manipulation of the anastomotic site may lead to anastomotic disruption and urinoma while use of thrombolytic therapy has fear of increasing hematuria. We report a case of anuria due to clot retention in upper tract following laparoscopic dismembered pyeloplasty in a solitary functioning kidney managed successfully with our double guide wire technique.

MP 03 – 02

Comparative study of various modalities in the treatment of renal pelvic calculi – 1 to 2 cm size

Siddharth Muniyasamy D, Natarajan T, Sunil Shroff, Venkatramanan

Sri Ramachandra Medical Center, Porur, Chennai

The primary goal of treating renal stone is maximal clearance of stone with minimal morbidity. Various modalities in the treatment of renal pelvic stone include ESWL, RIRS and PCNL. But each modality has its own benefits and limitations. Hence a reasonable modality has to be considered to provide an optimal outcome. For stones > 2cm are best treated with PCNL and symptomatic stones < 1cm is by ESWL while RIRS are considered in stones with difficult access calyces with minimal invasiveness. For stones of size 1 – 2cm the treatment option is still controversial. Hence considering the prime goal for the treatment of stone we have conducted a study with a period of 12 months and assessing the outcome of the three modalities for a renal pelvic / PUJ calculi, taking into consideration the complete stone clearance and the overall morbidity. This study concluded that each modality has its own complication rate from ancillary procedure to selective angioembolisation. This study includes 300 cases randomly selected equally for the above mentioned three modality and its outcome at complete stone clearance. This study will conclude the better modality with maximal stone clearance and minimal morbidity both physically and pathologically.

MP 03 – 03

Ureteral stents: morbidity and impact on quality of life

Vazir Singh Rathee

IMS BHU Varanasi

Introduction: Stents offer a simple and effective drainage method for the upper urinary tract. However, ureteral stents are associated with frequent side effects, including irritative voiding symptoms and hematuria. Material & methods: Symptom questionnaires were administered to 200 consecutive patients with unilateral ureteral stents. The questionnaire addressed irritative voiding symptoms, flank pain, hematuria, fever, loss of labor days, anxiety, sleep impairment, decreased libido, erectile dysfunction, dyspareunia, painful ejaculation, and a subjective overall impact on quality of life. The patients were seen and questionnaires filled at 2 weekly intervals following stent insertion until stent extraction. Results: Dysuria, urinary frequency and urgency were reported by 40%, 50% and 55% of the patients, respectively. Flank pain, gross hematuria or fever was reported by 32%, 42% and 15% respectively. Among working patients, 45% lost at least 2 labor days during the first 14 days, and 32% were still absent from work by day 30. Anxiety and sleep disturbance were reported by 24% and 20% respectively, and 45% of patients reported impairment in their quality of life. Decreased libido was reported by 45%, and sexual dysfunction by 42% of men and 86% of women. Stent removal necessitated ureteroscopy in 10%, due to upward migration in 8% and incrustation and impaction in 3. Spontaneous stent expulsion occurred in one patient. 34% were obstructed at the time of removal. Conclusion: Ureteral stents are associated with frequent side effects and significant impact on patient quality of life.

MP 03 – 04

Anejaculation following Aortic injury during surgery – A rare complication

Vazir Singh Rathee

IMS BHU Varanasi

Introduction: Stents offer a simple and effective drainage method for the upper urinary tract. However, ureteral stents are associated with frequent side effects, including irritative voiding symptoms and hematuria. Material & methods: Symptom questionnaires were administered to 200 consecutive

patients with unilateral ureteral stents. The questionnaire addressed irritative voiding symptoms, flank pain, hematuria, fever, loss of labor days, anxiety, sleep impairment, decreased libido, erectile dysfunction, dyspareunia, painful ejaculation, and a subjective overall impact on quality of life. The patients were seen and questionnaires filled at 2 weekly intervals following stent insertion until stent extraction. Results: Dysuria, urinary frequency and urgency were reported by 40%, 50% and 55% of the patients, respectively. Flank pain, gross hematuria or fever was reported by 32%, 42% and 15% respectively. Among working patients, 45% lost at least 2 labor days during the first 14 days, and 32% were still absent from work by day 30. Anxiety and sleep disturbance were reported by 24% and 20% respectively, and 45% of patients reported impairment in their quality of life. Decreased libido was reported by 45%, and sexual dysfunction by 42% of men and 86% of women. Stent removal necessitated ureteroscopy in 10%, due to upward migration in 8% and incrustation and impaction in 3. Spontaneous stent expulsion occurred in one patient. 34% were obstructed at the time of removal. Conclusion: Ureteral stents are associated with frequent side effects and significant impact on patient quality of life.

MP 03 – 05

Laparoscopic management of unilateral single system ectopic ureter with dysplastic kidney – rare cause of adult female urinary incontinence

Anil Verma, Ramanitharan Manikandan, Lalgudi N. Dorairajan, Kaliyaperumal Muruganandham, Santosh Kumar, Siddharth Kalra

JIPMER, Puducherry

Ectopic ureter draining a single system renal unit is a rare anomaly, especially in young woman. More than 80 % ectopic ureter in females drain a duplicated collecting system and usually present in childhood. We present our experience of 2 young female patients who presented to our department for management of urinary incontinence. Their age at presentation was 20 & 23 years respectively. Both woman presented with constant urinary dribbling with a otherwise normal voiding pattern after the age of toilet training. Clinical and per speculum examination showed constant urinary dribbling with pooling of urine in vagina. Ultrasound showed evidence of a solitary kidney with failure to visualize a contralateral kidney. IVU revealed only one functional renal unit. In one case DMSA with SPECT failed to localize dysplastic renal moiety . so intraoperative vaginoscopy was done to locate ectopic ureteric opening and RGP done to delineate renal location. In the second case MR urogram clearly depicted the course of ectopic ureter and location of the hypoplastic renal moiety. Both cases were treated by laparoscopic nephroureterectomy and were symptom free after surgery . Learning point Unilateral single system Ectopic ureter with dysplastic kidney is extremely rare and often overlooked cause of female urinary incontinence especially in young woman. MR urography is emerging as investigation of choice for diagnosis and therapeutic planning in such cases. Laparoscopic nephroureterectomy is a feasible minimally invasive treatment option for the management of such cases.

MP 03 – 06

A rare case of 7cm x 4.6cm dumbbell shaped vesicovaginal calculus in a complicated and recurrent vesicovaginal fistula, managed in two stages

Ashwin Sunil Tamhankar, Ajit Sawant, Vikash Kumar, Prakash Pawar, Kunal Aterkar

LTMMC & LTMGH , Sion Hospital, Mumbai

Introduction Vesicovaginal fistula (VVF) is prevalent in the developing world. Complicated, large size VVF in current scenario rarely results from injury in gynaecological operatives. Large calculus in such complicated VVF is a rare presentation. We report a rare case of a large dumbbell shaped calculus 7x 4.6cm extending from bladder to vagina with a constriction band at the site of fistula, in a patient with recurrent, complicated VVF managed successfully in two stages 6 weeks apart. The case was unique because of stone burden and difficulty in management of large defect with prior failed attempt of repair. Case Report 47 year female underwent total abdominal hysterectomy five years back with intra-operative attempt of bladder injury repair followed by another attempt of transabdominal VVF

repair. She presented with recurrent VVF with large calculus. Urine culture grew E Coli. Calculus was approached through bladder by transurethral laser cystolithotripsy followed by delivery of remaining vaginal component. Complete stone cleared in first stage which weighed 190gm. After 6 weeks, transabdominal repair with right ureteric reimplant was performed for complicated (5cm) VVF involving right ureteric orifice. This is a very rare case scenario with a large stone in complicated and recurrent VVF. Conclusion In cases of VVF, predisposing factors for a calculus are infection, foreign body, prolonged duration of disease. Large calculus can be best tackled by combined transvesical and transvaginal approach. Staged repair of fistula can be best done 6 weeks after resolution of stone induced edema and inflammation of the vesical wall.

MP 03 – 07

Prevalence of urological complications seen in cases of carcinoma cervix- a retrospective study

Bhavani Shankar G, Tyagi A, Anil Kumar N, Syam Sundar T

Sri Venkateswara Institute of Medical Sciences, Tirupati

OBJECTIVE: To determine the prevalence of and factors associated with urologic complications of carcinoma cervix presenting to our institute. **METHODS:** A total of 328 patients with histologically confirmed cancer of the cervix of stage 2A and above were retrospectively reviewed from November 2010 to May 2014. Patient's data was collected and analysed for urological complications and their treatment. All patients had undergone abdominopelvic scan to check for hydronephrosis and hydroureter and to measure the tumour volume. Serum creatinine and urea levels were noted. Cystoscopy was done in all these. Vesico-vaginal fistula (VVF) was ascertained from self-reporting and clinical records. Data analysis was performed using STATA version 10 (StataCorp, College Station, TX, USA). The prevalence of urologic complications was calculated, and the association between the presence of such complications and various characteristics was tested using logistic regression analysis. Multivariate analysis was performed by fitting logistic regression models to yield odds ratios and 95% confidence intervals, adjusting for variables that were found to have significant association on bivariate analysis. **RESULTS:** Mean age of patients was 44.9 years. Of the total 328, 109 patients developed at least one urological problem giving a prevalence of 33.23%. Of these 109 patients, hydronephrosis was observed in 46 patients (42.2%), bilateral in 24 (52.2%) and unilateral in 22 (47.8%). Increased serum creatinine was observed in 37(33.9%). Vesico-vaginal fistula occurred in 7 (6.4%). Vesico intestinal fistula in 1(0.91%). Urethral stenosis in 23 (2.1%). Patients with hydronephrosis were approximately 4 times more likely to have elevated serum urea and creatinine [OR 3.88, 95% C.I 2.01-7.48, p <0.001]. **CONCLUSIONS:** There is a high prevalence of urologic complications among women with cervical cancer. Urological sequelae of carcinoma cervix represent major complications, result in considerable distress for the patient and often present difficult therapeutic challenges for the urologist.

MP 03 – 08

Female voiding dysfunction due to external compression by occult gynaecological pathologies - a case series

Jain A, Gautam G, Ahlawat R

Medanta -The Medicity, Gurgaon

Introduction: We encountered five cases with severe refractory voiding dysfunctions, where further evaluation revealed unexpected gynaecological pathologies as etiology. **Material and methods:** The first one complained of recurrent retention of urine, requiring frequent catheterisation. Her uroflowmetry in interval period was normal. Second case a morbidly obese lady with past abdominoplasty and third case an elderly nulliparous lady; both had overactive bladder symptoms, which were not relieved even on highest doses of anticholinergics. Fourth case a young unmarried lady complained of intermittent leakage of urine with feeling of incomplete voiding and underwent bladder neck incision for this, but not relieved. Fifth case a postmenopausal lady, despite of several urethral dilatations for obstructive uropathy in past, presented with chronic renal failure. The sixth case admitted in emergency with progressively increasing lower abdominal pain and difficulty in passing urine with recent haematuria. **Results:** On

detailed investigations, we found that the first case had recurrent retention of urine, due to intermittent compression of bladder neck by a large subserosal cervical fibroid. Next three cases had huge subserosal anterior fibroids pressing over the bladder from above. Pelvic examination of fifth case showed a large cystocoele causing urethral kinking. Radiological Imaging of last case detected a large ovarian cystadenoma, compressing bladder and both ureters and on cystoscopy bladder cavity was found completely obliterated. Removal of causative pathology resulted in relief in each case. **Conclusion:** Gynaecological causes should always be considered in differential diagnosis for refractory voiding dysfunctions, even in absence of gynaecological symptoms.

MP 03 – 09

Comparitive study between modified tvt abbrevo versus standard TVT abbrevo in stress urinary incontinence

Konnur Nishant, Chawla A, Mishra D

Kasturba Medical college, Manipal

INTRODUCTION AND OBJECTIVE: TVTAbbrevo is being used successfully as a miniature sling in SUI. Our objective was to compare the outcomes of a minor modification in TVTAbbrevo technique with standard TVT abbrevo technique. **MATERIALS AND METHODS:** Out of 39 patients, 19 underwent modified TVTAbbrevo and 20 underwent standard TVT abbrevo procedure from Jan 2011 till Dec 2013. Modification was to exclude the use of tunnelling device and exit site at groin crease to minimise the tissue trauma. Exclusion criteria included Cystocoele > grade 2, pelvic prolapse, malignancy and prior radiation. All patients underwent pre-operative work up with clinical history, cough test, Ultrasound, Uroflowmetry with PVR and Urodynamics. Post-op evaluation comprised of patients' subjective assessment, quality of life questionnaire & objective assessment. Follow up examinations were performed at 1, 3 & 6 months and yearly thereafter. Peri-Operative complications, post-op groin pain and analgesia requirement, success rate of the procedure, post-op voiding dysfunction were evaluated. **RESULTS:** The mean age, parity and BMI in modified group was 52.2yrs, 3.2 and 27.2 respectively while that in standard group was 50.4yrs, 2.9 and 26.4 respectively. Mean operative time was 12mins 30 seconds in modified TVT Abbrevo whereas it was 13mins 40 seconds in standard TVT Abbrevo. Mean hospital stay and catheter indwelling time was 2.1 days & 18.4 hrs in modified group and 2.6 days & 19.2hrs respectively in the standard group. Postoperative groin pain and analgesic requirements was less in modified TVT Abbrevo group. **CONCLUSIONS:** Modified TVTAbbrevo is a simple, safe and effective procedure with comparable short-midterm cure rates to standard TVTAbbrevo. The modifications of avoiding the tunnelling device and groin exit helped to minimize the groin pain and analgesic requirements.

MP 03 – 10

Complications in midurethral sling procedures

Patel B, Talaulikar A, Kumar S, Bapat SS

Ratna Hospital, Pune

Introduction: Mid urethral sling procedures are the procedures of choice in most women with stress incontinence. Although minimally invasive procedures are associated with complications which may necessitate the removal or alteration of these tapes. We present our series of 6 cases 3 of extrusion of the tape, one of infection, one of retention and one of a stone formed over the tape. 3 of the complications were from our series of 124 cases. **Materials and Methods:** The patients presented to us with discharge per vaginal, retention, and pain during intercourse. 3 of the 6 patients came for a routine follow up after their procedure. The remaining patients were referred to us. The average age was 45 years. The procedure had been performed at least 6 months before the presentation. **Result:** The tape had to be excised partially in the three patients. The tape had to be removed in the patient with the infected tape and a deferred mid urethral sling had to be done after 3 months. The tape had to be taken down in the patient with the stone and a rectus fascial sling procedure was done after 3 months. **Conclusion:** Although the mid urethral sling procedure is an accepted procedure of choice in stress incontinence it is associated with complications. These complications need to be tackled appropriately.

MP 03 – 11**Transpubic anastomotic urethroplasty for repair of post traumatic pelvic fracture-urethral injury in a female****Shaikh Irfan A, Sharma A, Chaudhari R, Desai R, Andankar M G, Pathak H R**

TN Medical College & BYLNair Hospital, Mumbai

Introduction Injuries to the female urethra associated with pelvic fracture are uncommon. We present a case in which transpubic anastomotic urethroplasty was used for management of post traumatic urethral injury in female. Material and methods A 35 year old female presented to us with history of blunt trauma to abdomen and pelvis with urinary retention, after failed attempt at per urethral catheterization suprapubic cystostomy done. CT revealed multiple fractures of both pubic bones involving superior and inferior rami and right sacral ala which was managed conservatively. MCU done 3 months post injury revealed complete cut-off at bladder neck, urethra was not visualized. Patient underwent transpubic anastomotic urethroplasty, there was complete disruption of urethral just distal to bladder neck anastomotic urethroplasty was done after mobilizing both ends. Per urethral catheter was removed after 3 weeks. Results Currently patient is 8 month post-op, patient is voiding well with no straining or no complaint of urinary incontinence. Conclusion For urethral injuries associated with pelvic fracture in females delayed reconstruction using transpubic anastomotic urethroplasty can be done with good results.

MP 03 – 12**Isolated penile Gas gangrene in spinal cord injury. Case report secondary to priapism****Abdul Rouf Khawaja, Tanveer Iqbal, Javeed Magray, Ashiq Hussain, Arif Hameed, Saleem Wani, Baldev Singh**

Sheri Kashmir Institute of Medical Sciences Soura Srinagar

Introduction : Genital skin has a greater incidence of bacterial colonization following spinal cord injury patients compared to normal individuals. Many neurologic conditions including spinal cord injury as risk factor for priapism. Disturbances in the neuroregulation of penile erection at central or peripheral nervous system a probable basis for priapism. Material & Methods : We present a case 38 yrs old patient married with 3 issues had spinal cord trauma with fracture lumbo dorsal vertebrae which was stabilized 8 months back with paraplegia and was on indwelling catheter. Patient attendants noticed painless erection which was missed by local practitioner and subsequently developed necrotising fasciitis with extensive gas in all three corpora. Results : Total penectomy with perineal urethrostomy was done and patient was discharged uneventfully. Conclusion : Priapism was unnoticed in this patient due to absence of pain which progressed to ischemic injury to endothelial lining of corpora with superadded genital infections. Moreover caretakers and general practitioners should be aware of such condition in spinal trauma to prevent such devastating complication.

MP 03 – 13**Nephron Sparing Surgery in Case of Emphysematous Pyelonephritis****Jaisukh Kalathia, Santosh Agrawal, Saurabh Chipde, Rajeev Agrawal**

Sri Aurobindo Medical College & Postgraduate Institute, Indore

Introduction Emphysematous pyelonephritis is fatal necrotizing infection of the renal parenchyma and perirenal tissue where percutaneous drainage with antibiotics or in severe cases life saving emergency nephrectomy is recommended, but we performed the nephron sparing surgery with good outcome. Case presentation A 60 years old female came with history of severe left flank pain associated with fever for last 15 days. Patient was a known case of diabetes mellitus for last 2 years. On examination there was a lump in left lumbar region with severe tenderness. The routine investigations showed increased blood sugar level, leucocytosis and serum creatinine of 3.0mg/dl. The NCCT-KUB suggested class 3B emphysematous pyelonephritis involving the left kidney with gross perirenal collection. Emergency pigtail inserted in perinephric space. A repeat CT scan suggested upper and lower pole destruction with spared middle pole. Decision for

left open drainage was taken. Intraoperatively multiple perinephric pus pockets with completely destroyed upper and lower pole of kidney were noted. The middle pole of the kidney showed good parenchyma. Both the upper and lower poles were debrided. In Post operative period there was persistent drain output, suggestive of urinary leak, so a DJ-stent was placed. The drain-output gradually decreased and completely stopped after 1 month. Conclusion In severe cases of emphysematous pyelonephritis, nephron sparing surgery could be attempted with due risk in selected cases.

MP 03 – 14**Recurrent E.Coli Urinary tract infection: A cause for concern?****Sankapal P, Halarnakar RG, Cardoso A, Gomes K, Prabhudessai MR, Punjani HM**

Goa Medical College, Goa

INTRODUCTION AND OBJECTIVE: Genitourinary tuberculosis accounts for 30 to 40% of extra-pulmonary Kochs. Sterile pyuria is seen in majority of patients, however 20% may have superimposed bacterial infection. Aim was to study the association of Escherichia Coli as secondary uropathogen with genitourinary tuberculosis in patients presenting as recurrent urinary tract infections. MATERIALS AND METHODS: This is a retrospective analysis of 100 consecutive patients of genitourinary TB from Jan 2011 to June 2014. As a protocol for recurrent UTI, all patients were evaluated with history, examination, urine microscopy, culture and ultrasonography. Those who did not respond to standard antibiotic therapy underwent Tuberculin testing, IVP, CT scan, voiding Cystourethrography and cystoscopy accordingly. All proven patients were treated with AKT and urine cultures repeated after six weeks. RESULTS: 28/100 patients with Genitourinary Kochs did not have any symptoms of Genitourinary Kochs other than recurrent UTI. They were treated as per the urine culture report with antibiotics. Urine culture isolated E.coli in 21 and mixed growth in 7 patients. As these 28 patients were not responding optimally to antibiotics they were subjected to further biochemical and radiological studies which clinched the diagnosis of Genitourinary Kochs. All patients were managed medically and 6 required surgical intervention. All had sterile culture after 6 weeks of AKT. CONCLUSION: Genitourinary TB is common in India especially in immunocompromised host and should be suspected in patients with recurrent UTI. E.coli is the commonest secondary uropathogen seen in genitourinary TB. Urine for AFB staining and culture is sparingly positive.

MP 03 – 15**Outcomes of laparoscopic pyeloplasty using barbed suture v/s non-barbed suture: a retrospective comparative study****Giri V, Tomar V, Yadav SS, Priyadarshi S, Vyas N, Agarwal N**

Sawai Man Singh Medical College, Jaipur

Introduction: Laparoscopic pyeloplasty is becoming an important tool in Urology armamentarium. The most important & also the most difficult part of Laparoscopic pyeloplasty is intracorporeal suturing and knotting for uretero-pelvic anastomosis. There are only a few reports of knotless barbed sutures for upper tract reconstruction. We report comparative outcomes of Laparoscopic Pyeloplasty with barbed suture v/s non barbed sutures used for uretero-pelvic anastomosis. Materials & methods: We retrospectively reviewed patient's records that underwent Laparoscopic pyeloplasty from January 2013 to May 2014. Total 37 patients were evaluated. 4-0 absorbable barbed suture was used in 21 patients and 4-0 vicryl (non-barbed) used in 16 patients for uretero-pelvic anastomosis. Total operative time, intracorporeal suturing time, post operative complications, symptoms & renal isotope scan were recorded. Results: Average total operative time was 162 minutes in barbed suture group v/s 208.5 minutes in vicryl group. Average time for intracorporeal suturing was 31.2 minutes (barbed) v/s 70 minutes (Vicryl). One patient (barbed group) developed post operative urine leak, which persisted for 5 days (4.76%). Most common complication was UTI, 2 (9.5%) in barbed group v/s 2 (12.5%) in vicryl group. JJ stent was removed at 4 weeks. Median follow up was 3 months with 7 patients lost to follow up. None of the patients found to have obstructive drainage on isotope renogram at 3 months. Conclusion: Laparoscopic pyeloplasty with barbed suture has acceptable outcome when compared to conventional non barbed suture on short term basis.

MP 04 – 01

Early experience in laparoscopic pyeloplasty

Kuppurajan N

Kovai Medical center and Hospital, Coimbatore

Introduction & objective Dismembered pyeloplasty is established treatment for PUJ obstruction with open or Laparoscopic Approach. To assess outcome in Laparoscopic Pyeloplasty in our institution which we have started since 2009. Methods Consecutive 45 cases of Laparoscopic pyeloplasty were analysed retrospectively. All undergone three port transperitoneal approach. The data collected were mode of presentation, Method of Imaging, split function pre and post op, operating time, post op complication and over all outcome. Results Out of 45 patients 30(66%) presented with loin pain, 7(15%) with Urinary tract infection, 8(17%) on routine evaluation in master health check up. All patients had normal renal function. The standard imaging was Ultrasound and DTPA renogram. For anatomical study either IVU or CT KUB was done. On DTPA renogram 19 patients had split function of (20-30%), 18 patients (30-40%) and 8 patients had >40%. Operating time varying from 180-300 minutes with a mean of 210 minutes. post operative period two had infection, two patients had urine leak requiring re-positioning of stent. Initial 18 patients had interrupted sutures and remaining 27 patients had continuous sutures to reconstruct the pelviureteric junction. Those who had interrupted sutures had catheter for 10 days but all continuous suture were send home without any catheter or drain. 40(88%) patients came back for follow up. Out of 45 patients one required open revision pyeloplasty. Conclusion Laparoscopic dismembered pyeloplasty is safe and effective procedure with acceptable complication. The continuous sutures appear to have minimal urinary leak than interrupted sutures in our limited series

MP 04 – 02

Umbilical only access laparoscopic pyeloplasty in children

Siddayya C Hiremath, RB Nerli, Mallikarjun Reddy

KLE'S Kidney Foundation, KLE University Belgaum

Introduction: Over the past three decades laparoscopic surgery has become a well-established alternative to open surgery in the management of UPJ obstruction. Currently several efforts are being made, aimed at further reducing the morbidity associated with conventional laparoscopy. We report our experience with umbilicus only access laparoscopic pyeloplasty in children. Materials and Methods: Children presenting with hydronephrosis secondary to UPJ obstruction formed the study group. In children undergoing the umbilicus only access laparoscopy, a 5 mm endoscopic port was placed on the inferior umbilical crease. Two 3 mm instruments were introduced through puncture sites created a few mm superior and lateral to the endoscopic port, under direct vision. Total operating time, time taken for insertion of double pig tail catheter, time taken for pyeloplasty anastomosis and complications were noted. Results: During the study period, 14 children underwent umbilicus only access laparoscopic pyeloplasty. The mean operating time was 93.33±2.89 mins, the mean time for insertion of double pigtail catheter was 7.67±1.53 mins and mean time for completion of anastomosis was 14.00±1.00 mins. Conclusions: It is feasible to perform laparoscopic pyeloplasty in children using this modified umbilicus only access. This access reduces the morbidity associated with conventional multiport laparoscopy without the need for expensive multichannel cannulas, curved laparoscopic instruments and longer laparoscopic endoscopes.

MP 04 – 03

Self introduced unusual intravesical foreign bodies : presentation and management

Agrawal T, Gupta R, Bora G S, Swaroop L, Singh P, Kumar R, Dogra P N

All India Institute of Medical Sciences, New Delhi

Introduction : Foreign bodies are often introduced in urethra for autoerotism, psychometric problems, sexual curiosity, or sexual practice while intoxicated. The treatment of foreign bodies is determined by their size, location, shape, and mobility. The main aim should be extraction

of foreign body with minimal trauma. In most cases, minimally invasive endoscopic removal are recommended to prevent bladder and urethral injuries. However, open surgical treatment should be considered if the foreign bodies cannot be removed by the endoscopic procedure or further injuries are expected as a result of the endoscopic procedures. Materials and Methods: We encountered 3 young males in casualty department, with past history of frequent self introduction of various types of foreign bodies for sexual gratification. One of the patient inserted iv infusion set, another inserted suction catheter, both presented in retention with knotted inside the bladder. Third patient inserted a necklace and presented with dysuria. Results: In first two cases we managed in similar way with urgent urethroscopy after pushing tubes back into the bladder. On cystoscopy there was multiple intravesical knotting. With the use of endoscopic scissor knots were cut at multiple sites and pieces were removed with help of endoscopic forceps. In third patient, Cystoscopy could not be done because urethra was filling with thick beads of the necklace. Necklace was cut at meatal end and decision was taken for open suprapubic cystostomy. Open suprapubic cystostomy was done and necklace was removed. Check urethroscopy was done to makesure whole of the foreign body has been removed. All these patients were also sent for psychiatric evaluation. Conclusions: In first two cases foreign bodies were removed transurethrally with minimal invasive approach. Out of various management options transurethral removal is well suited for transurethrally introduced small foreign bodies.

MP 04 – 04

Management of Giant Bladder Diverticulum – a tertiary level centre experience

Dipak Kr Shaw, Pranab Patnaik, VS Rathee, Sartaj Wali Khan, Sameer Trivedi, USDwivedi

IMS, BHU, Varanasi

Introduction: Giant Bladder Diverticulum, size greater than 7 cm, is a rare disorder. We present a series of 12 cases of Giant Bladder Diverticulum, presented with voiding difficulty and recurrent UTI. The aim is to highlight the diagnostic difficulties and management issues of Giant Bladder Diverticulum. Material and Methods: We reviewed 12 patients (Age 5-30 years) with Giant Bladder Diverticulae in the last 5 years. Nine were males and three were females. All patients had urine examination, RFT, USG, IVU, voiding cystourethrogram(VCUG) with or without cystoscopy. Eight patients presented voiding difficulty and 4 patients presented recurrent UTI. VCUG confirmed the diagnosis in all cases. In each patient VCUG showed Giant Bladder Diverticulum, V-Ureflux (Grade 4-5) into the ipsilateral ureter was seen in 7 and bilateral in 3 cases. Results: All patients underwent open extravesical diverticulectomy with re-implantation of the ipsilateral ureter in 7 and bilateral in 3 cases. All had an uneventful recovery except one who had a suprapubic leak which healed on conservative treatment. Postoperative ultrasonograms showed mild hydronephrosis in 2 cases and VCUG revealed a grade III V-U reflux in one case which was managed conservatively. Patients are maintaining a sterile urine culture after a follow up of 6-36 months. Conclusions: Giant bladder diverticulum is an uncommon clinical entity and may cause voiding difficulty and should be kept as a differential diagnosis in cases of recurrent UTI. A carefully done VCUG is the hallmark of diagnosis. Good results can be achieved by diverticulectomy and primary definitive repair with ureteric reimplantation.

MP 04 – 05

Renal angiomyolipoma and renal tuberculosis - can they occur together

Kulkarni Raghavendra, Tripathy Nagendra Prasad, Rao Nagaraja A.

St John's Medical College and Hospital, Bangalore

INTRODUCTION AND OBJECTIVE: Renal angiomyolipoma is a benign neoplasm accounting for less than 10% of renal tumours. Recent evidence suggests neoplastic origin with monoclonal source. It is now considered to be neural crest in origin, possibly derived from perivascular epithelioid cells. The co-existence of renal angiomyolipoma along with renal tuberculosis in the same kidney is a rare entity. METHODS: A 56 year old female presented with incidentally diagnosed ? left renal calculus and left renal mass

diagnosed on ultrasonography. In order to further characterise the lesion, patient underwent CT scan – large well defined exophytic predominant fat density lesion arising from anterior cortex in the interpolar region with thick nodular calcification in the medial aspect of lesion with enlarged lymph nodes in the left renal hilum and para-aortic area with reduced size of left kidney and poor contrast excretion. The renogram study revealed left non – functioning kidney. The patient underwent left nephrectomy. RESULTS: On histo-pathological examination, external surface of the left nephrectomy specimen showed nodular mass arising from mid third of kidney. The cut surface being lobulated, yellowish with small haemorrhagic area in the periphery of the lesion with multiple yellow necrotic and cystic areas filled with chalky white material with loss of cortico-medullary distinction. On microscopy, mature adipocytes intermixed with cells with spindle shaped nuclei with many thick walled blood vessels. The adjacent renal parenchyma exhibited sclerosed glomeruli and dilated tubules with interstitium showing dense chronic lymphoplasmacytic infiltrate along with many granulomata composed of epithelioid cells, multinucleated giant cells along with large areas of necrosis with acid fast bacilli. Immunohistochemistry demonstrated SMA, CD34 positivity with some of the tumour cells expressing HMB45. CONCLUSION: The coexistence of renal angiomyolipoma along with renal tuberculosis of the same kidney is an entity not been reported so far in the literature. Thereby due to its rare presentation, this clinic-pathological condition is presented.

MP 04 – 06

Profile of renal trauma and its management – our experience

Narendra JB, Karthikeyan VS, Ratkal CS, Chandrashekhar CR, Kamath AJ, Nagaraja NH, Keshavamurthy R

Institute of Nephrourology, Bangalore

Introduction and Objective: Surgical exploration in renal trauma inevitably results in nephrectomy in all but a few specialized centres. Most hemodynamically stable patients are now successfully managed non-operatively. This study analyses the clinicoradiological profile of renal trauma patients and their management. **Methods:** Analysis of renal trauma patients from 2007-14 at our institute. **Results:** A total of 57 patients (Male – 50; 87.7%) were studied. The median (\pm IQR) age was 25 ± 20 years and length of hospitalisation (LOH) was 9 ± 7 days. The distribution of patients based on AAST classification of renal trauma was 6 (10.5%) in class I, 18 (31.6%) in class II, 14 (24.6%) each in class III and IV and 5 (8.8%) in class V. Twenty-three (40.4%) had right sided, 32 (56.1%) left sided and one (1.8%) had bilateral involvement. Non-operative management was successful in 49 (86%) patients. A total of 13 procedures were done on 8 (14%) patients. Four underwent RGP, five DJ stenting, one PCN, one open drainage, one ultrasound-guided aspiration and two underwent nephrectomy. Rib fractures were the most common associated injury, seen in 7 (11.9%) and urinoma in two patients. LOH was significantly higher with higher grade of injury ($p=0.025$) and more in males ($p=0.000$). There was no mortality. **Conclusion:** With advances in medical management, renal trauma, though renal injury is life-threatening, nephrectomy is rarely needed and if meticulously managed, mortality can be minimal. Higher grade injuries (IV, V) can be successfully managed with minimally invasive options like stenting or nephrostomy.

MP 04 – 07

Acute urinary retention due to non urological masses - case series

Neelakandan R, JayaganeshR, LeelakrishnaP, Govindarajan, Ilango, Saravanan, MuthulathaN

Govt Kilpauk Medical College and Govt Royapettah Hospital, Chennai

INTRODUCTION Urinary retention due to non-urological causes is very rare. But here we are presenting 3 interesting non urological cases presenting as acute urinary retention. **Case series 1.** A 50 year old male presented with complaints of obstructive LUTS-5 months. Suprapubic cystic mass 24 weeks in size. CECT abdomen and pelvis revealed a cystic mass lesion in retrovesical location probably seminal vesical cyst or inflammatory mass. Underwent exploratory laparotomy -15 cm mesenteric cystic mass. Final biopsy came to be mesenteric GIST. **2.** 40 year man with acute retention and CT pelvis shown pararectal cystic mass and finally

exploratory laparotomy revealed inflammatory abscess in the pararectal region which was drained and patient improved. **3.** 35 year old man with obstructive LUTS and CT/MRI revealed seminal vesicle tumor with pelvic wall infiltration (T4N0M0) and transrectal bx came to be adeno-carcinoma of seminal vesicle and patient started on neo-adjuvant doxorubicin based chemotherapy and planned for radical excision surgery after 3 cycles of chemotherapy. **CONCLUSION** GIST presenting purely with LUTS and leading to retention of urine is not a described entity. Loculated Para rectal abscess may be present as acute urinary retention. Seminal vesicle adenocarcinoma is a rare malignant tumor may present as obstructive LUTS and very aggressive advanced stage in young age population. Thus, these rare entities should also be borne in mind and considered as a cause for retention of urine.

MP 04 – 08

Forgotten DJ Stents - A Source of Severe Morbidity

Prasad V Magdum, RB Nerli

KLES Dr Prabhakar Kore Hospital & MRC, Belgaum

Introduction: Ureteral stents have become essential for maintaining ureteral patency during the management of various benign and malignant forms for ureteral obstruction to maintain the patency of the ureter and promote healing. Short term complications of DJ stents include infection, hematuria, pain and stent syndrome. However, long term retention of stents can lead to migration, encrustations, stone formation, fractures, blockade of stents, hydronephrosis and at times loss of renal function. We report our experience in the management of forgotten stents. **Materials and Methods:** Patients presenting to us with forgotten or long term retention of DJ stents formed the study group. **Results:** During a two year study period, 33 patients reported or were referred to our department with history of forgotten stents. Fourteen patients had severe encrustations with both renal and vesical calculi. Eight others had either only renal or vesical calculi. Nine had fracture stents and vanishing portions of stents and two had multiple renal, ureteric and vesical calculi. A combination of PCNL, URS (Retrograde/Antegrade), ESWL, open surgery and medications were done to clear the stones and extract the DJ stent. **Conclusions:** Forgotten or retained stent is a source of severe morbidity and also financial strain. To avoid the morbidity of forgotten stents, some feasible and effective preventive methods must be established, such as patient registry system in hospitals.

MP 04 – 09

Long term complications of JJ stent and its management: a five years review

Rajendra Prasad Ray, Chowdhury S, Ghosh B, Pal D K And Bera M K

IPGMR & SSKM Hospital, Kolkata

INTRODUCTION AND OBJECTIVES: JJ stent is widely used in urological practice. Ureteric stents are not complication free. Stent related complications are primarily mechanical. We studied the long term complications of JJ stent and its management and to assess the long term complications of JJ stent and its management and the role of endoscopic approach to manage this complications. **METHODS:** Nineteen patients with indwelling JJ stent more than 6months duration were including this study. Patients were assessed with x-ray KUB, USG KUB, blood urea, creatinine and DTPA renogram. Data were analyzed by Microsoft excel 2007. **RESULTS:** Out of 19 patients 12 (63.16%) were male and 7 (36.84%) were female. The mean age was 39.78 \pm 13.69 years, Mean duration of stent was 29.56 months. Most common complication was broken stent, which were 11 (57.89%). Other complications were migration 5 (26.32%), encrustation 2(10.52%) and 1 case of (5.26%) stone formation. 18 cases were managed by endoscopic approaches. A total of 22 procedures were performed to treat the complications. 11 cases were managed by single procedure and 8 patients required multiple procedures. Total 22 procedures were performed. All were managed successfully with no death reported. Post operative complications were seen in 8 cases (42.11%). **CONCLUSIONS:** JJ stent related long-term complication is not uncommon and usually seen after 6 months of indwelling time. Endourological procedure should be the initial approach with a high success rate. Coordinated use multimodality and technology helps in management of difficult cases. Open surgery is rarely required. Prevention of the complication by judicious use and early removal is the cornerstone.

MP 04 – 10**Retained tubes in urology****Rajkumar TR, Senthil D, Gowdhaman S, Muthu V, Vairavel P, Meyyappan RM, Subramanian S**

SRM Medical College & Research Centre, Chennai

INTRODUCTION: Retained tubes continue to remain one of the biggest problems in the urology at present outset in spite of all the efforts taken to prevent it. **OBJECTIVE:** Here we review our experience in the management of various retained tubes such as ureteral stents, suprapubic catheter and nephrostomy tubes. **Materials and methods:** We retrospectively reviewed our institute database from June 2013 to July 2014 for patients who presented to our department with various retained tubes like ureteral stents, suprapubic catheter and nephrostomy tubes. We assessed the reason for lost follow up, preoperative factors, management of such tubes and the efforts taken to prevent it. **Results:** A total of 11 patients were identified with retained tubes of which nine were with retained urethral stents, one with retained suprapubic catheter and one with nephrostomy tube. Six retained ureteral stents patients were managed by simple ureterorenoscopy and stent removal. Three patients required percutaneous nephrolithotomy and ESWL along with ureterorenoscopy to remove the retained fragments. Patient with retained suprapubic catheter was managed with open vesicolithotomy along with the removal of cuff of bladder wall. One patient with nephrostomy tube required a nephrectomy in spite of being a solitary functioning kidney as it was infected pyonephrosis. All the patient was free of stone symptoms on follow up and two of them were chronic kidney disease on haemodialysis. **Conclusion :** We hereby conclude that patient education and awareness are the most important factors in preventing the morbidity because of these retained tubes.

MP 04 – 11**An unusual foreign body in the vagina leading to a large vesico-vaginal fistula- a case report****Sharma P, Sankhwar S N, Kumar M, Singh V, Sinha R J, Gupta S, Sharma K**

KGMU Lucknow

Introduction and objective- Foreign body is a rare cause of vesico-vaginal fistula most often reported in developed countries and more common in children. We wish to present a case of unusual foreign body in the vagina leading to a large vesico-vaginal fistula. **Material and method-** A 28 year old newly married woman presented with complains of pain during intercourse and foul smelling vaginal discharge for 3 months. She also complained of urinary leak per vaginum with normal voiding 2 months. On examination a stony hard, impacted object was palpable. Non contrast Computerized Tomography (NCCT) KUB suggestive of an 8x6 cm hyper dense object in vagina extending in to bladder lumen with normal upper tract. **Result-** Cystoscopy and vaginoscopy confirm encrusted foreign body with major part in vagina. With successful trans-vaginal removal of the plastic container (7 cm) a large vesico-vaginal fistula (VVF) was noted measuring about 5 cm in diameter. Decision to repair VVF 6 weeks later was taken as tissue of bladder and vagina was inflamed with fibrosis at fistulous site. **Conclusion-** Foreign body in vagina in a young female with no previous history of any of intervention or pregnancy may present as VVF. We provide her support for psycho-social rehabilitation. We advised her to abstain from intercourse for 3 months and elective caesarean section in the future.

MP 04 – 12**Study of interdepartmental Urological consultation in Tertiary care teaching hospital – need for guideline to optimize outcome****Talwadker NB, Halarnakar RG, Koshy J, Lawande PR, Prabhudessai MR, Oza U**

Goa Medical College

INTRODUCTION AND OBJECTIVE: To study the pattern of references received by urology department in a tertiary care teaching hospital. To create guidelines for approaching these referrals for optimal patient outcome. **MATERIAL AND METHODS:** Urological consultations /

references from other departments in tertiary care teaching hospital were analyzed from April 2013 to March 2014. Patients were categorized based on: referring departments, need for urological intervention, primary urological cases (missed initially) admitted by other departments. **RESULTS:** Total number of references was 949 - Medicine department (40.57%), Surgery (23.60%), Orthopaedic (16.02%) and OBG (9.48%). Among these patients 87 were primary urological cases which were misdiagnosed initially and admitted in other departments. 181/949 (19%) of the total referred patients had to undergo urological intervention, of which 35.9% were from surgery and 34.2% were from medicine. 62/180 (34.44%) patients admitted in medicine department as prolonged fever under investigation were found to be secondary to urological pathology. 34/138 (24.6%) patients admitted in medicine department as uncontrolled DM with sepsis had primary urological cause. Most of the gynaecological references were for obstructive uropathy secondary to malignancy. Urological malignancies are often incidentally detected in orthopaedic wards in patients with pathological fractures. **CONCLUSION:-** An unbiased, broad minded, holistic approach towards referred patients contrary to the usual "Tubular vision practice" of super speciality Departments, is extremely necessary while attending urological consultations, to minimise errors in patient management.

MP 04 – 13**Late presentation of posterior urethral valves :is it a benign condition****Giriraj Vala, K Sasidharan, Vikraman, Jagdeep, Saurabh, Jitendra**

KIMS Hospital, Trivandrum

Posterior urethral valves are usually diagnosed during infancy with prenatal ultrasonography. Rarely posterior urethral valve is diagnosed during later childhood, adolescence or even old age. Less is known about presentation in these older patients. We described a rarer case of posterior urethral valve in a 54 years old gentleman who presented with mild voiding difficulty associated with mild renal impairment. We also reviewed our experience with late presentation of posterior urethral valve in 10 patients. Data collected included presenting symptomatology and renal function. Results showed that severity of presenting signs and symptoms was significantly associated with renal impairment while patient age at diagnosis was not. **Conclusion** that late presentation of valves does not universally spell about favourable prognosis for patient.

MP 04 – 14**Efficacy of PCNL in pediatric patients using conventional adult instruments: a single center experience****Prasad HL, Nagabhusan M, Keshavamurthy R, Chandrashekar CR, Nagaraja NH, Ratkal CS**

Institute of Nephro Urology, Bangalore

Introduction and Objective: Pediatric percutaneous nephrolithotomy (PCNL) has revolutionized the treatment of pediatric nephrolithiasis. Pediatric PCNL has been performed using both adult and pediatric instruments. Stone clearance rates and complications vary according to the technique used and surgeon experience. We present our experience with PCNL in pediatric population <18 years. **Methods:** All pediatric patients undergoing PCNL using conventional adult instruments between November 2012 and June 2014 were included. Demographics, surgical details and post-operative follow-up information were obtained to identify stone clearance rates and complications. Stone complexity was defined according to validated Guy's stone score (GSS). **Results:** PCNL was performed in 16 patients (mean age: 12.25 years). The mean stone diameter was 20mm (10–30mm). Thirteen (81.25%) patients required single puncture and three patients required multiple tracts. The tract was dilated (24-30F) under fluoroscopic guidance and adult rigid nephroscope complemented with semirigid ureteroscope (8/9.8F). Twelve (75%) patients were completely stone free following initial PCNL. Two patients required ESWL for residual fragments and one required relook PCNL, giving an overall stone free rate of >90% following treatment. One patient had significant intraoperative bleeding, two had post-operative fever and one needed intercostal tube drainage. No patient needed a blood transfusion. There was no mortality. **Conclusions:** PCNL can be performed safely with minimal morbidity using adult instruments in pediatric patients for both simple and complex stones, enabling rapid and near-complete stone clearance.

MP 05 – 01**Xanthogranulomatous pyelonephritis masquerading as malignant renal mass in a 12 year old boy**

Yunus KK, Vikram Nimboor, Luqman Ahammed, Anoop K Sankar, Manu MK , Nazar M

Govt. TD Medical College, Alleppey

INTRODUCTION & OBJECTIVE : Xanthogranulomatous pyelonephritis (XGPN) is extremely uncommon in children . The clinical and radiological findings of XGPN closely resemble other pathological entities such as wilm's tumour and renal cell carcinoma. **STUDY METHODS:** A 12 year old boy presented with recurrent vague flank pain for last 5 years. There was no history of fever, chills, hematuria, pyuria or loss of weight. General and abdominal examination and blood and urine investigations were within normal limits. An ultrasound scan of the abdomen showed a well defined heteroechoic lesion in the interpolar region of the right kidney with compression of calyces. Contrast enhanced CT showed 5.6 X 4.3 X 4.3 cm heterogeneously enhancing solid lesion in the mid and lower pole of the right kidney with extension to perinephric space and hepatic flexure suggestive of a malignant renal mass. **RESULTS** Right open adrenal sparing radical nephrectomy was performed. The final histopathological examination was consistent with the diagnosis of XGPN. **CONCLUSION** XGPN has been called as the great imitator. No single radiological sign is pathognomonic of focal XGPN. Histological surprise like this may be expected despite careful evaluation as it is difficult to differentiate XGPN from malignant renal tumors

MP 05 – 02**Two giant anterior urethral diverticulae – one with stone & other with obstruction**

K Sreedhar, Kammela Sridevi, Syed Alimuddin, Azharuddin, Vittala Srishailesh, Dorai, V Devaprasad

Dr Sreedhar's Kidney, Fertility, IVF Institute, Hyderabad

1) A 50 year old man with fever, vomiting, chills and rigor was brought to emergency dept. He became drowsy for past 24 hours. He was aware of a gradually increasing hard mass in peno-scrotal junction for several years. He recently developed multiple discharging sinuses over it, though he could pass urine well. His serum creatinine was 6.2mg% & blood urea 220mg%. His x-ray pelvis including genitalia showed a large laminated stone of 8.5 X 6.0cm. He began to have hematuria, epistaxis & GI bleeding. His platelet count was very low (30,000/cu.mm) & FDP were present suggesting D.I.C. He was given cefotaxime, netilmicin, fresh blood & platelet transfusions. He was also given 20 exchanges of peritoneal dialysis. After 10 days of critical period he recovered & renal parameters came back to normal. A R.G.U. film showed 9.5 X 7.0cm saccular diverticulum in penoscrotal area with stone in it. A suprapubic cystostomy & diverticular stone was removed leaving wound open in view of infection. Six weeks later, excision of diverticular sac & urethral reconstruction was done. A voiding cystourethrogram after 3 weeks showed repaired portion was normal and his urinary stream was excellent. Review of literature showed previous reported large diverticular stones are in the range of 2.2-4.0cm. This is probably the largest stone removed from anterior urethral diverticulum & hence presented for its giant size & successful result in a critically ill patient. 2) A 24 year young man presented with dysuria, obstructive urinary symptoms and bulge in perineum for more than 6 years. He also dribbles urine after completing the act of voiding. By pressing this swelling several drops of urine are emptied. This swelling interfered with coitus, in the sense that drops of urine dribble during act. The swelling has been increasing slowly over last few years. Urine dribbles while sitting & riding two-wheeler. Hence he sought relief for this multi-faceted problem. Clinical examination showed a bulge of 5 cm. in perineum on straining while voiding. His ultrasonogram showed normal kidneys & bladder. Voiding cysto-urethrogram showed a tubular diverticulum in bulbar urethra parallel to native urethra. In view of his symptoms, excision of large anterior diverticulum was planned. The patient was operated in lithotomy position and thin walled diverticular sac excised. The communication with natural urethra was closed. He has smooth recovery & post-operative voiding cystourethrogram showed normal calibre urethra. He now voids in good stream & all his symptoms subsided.

MP 05 – 03**Cervicovaginal Atresia: Ileao-Cervicovaginoplasty, A Case Report**

Kumar L, Bhat AL , Arya M, Kumar V, Upadhyay R, Kumar R

S P Medical College, Bikaner

INTRODUCTION: Incidence of cervical atresia is very rare; less than 200 cases have been reported in literature. Initially Hysterectomy was the only procedure, which was later replaced by cervical canalization and serial dilatation as well as colonic neocervix neovagina formation. We have performed ileao-cervicovaginoplasty. **PRESENTATION OF CASE:** A 16 year old female admitted with complaints of cyclic suprapubic pain for two year with primary amenorrhoea and continuous suprapubic pain for last two months. Physical examination shows tender suprapubic lump extending upto umbilicus, on per rectal examination mass bulging on rectum found, external genitalia was normal, finger reached upto four centimeter on per vaginal examination. Blood reports were normal; Ultrasonograph (USG) abdomen shows dilated uterus with bilateral hypoechoic adnexal mass. Magnetic resonance imaging (MRI) abdomen revealed cervicovaginal atresia with hematometra and hematosalpinx and bilateral polycystic ovarian mass, without any other anomaly. Patient posted for surgery, neocervix and neovagina formed by ileum. In follow-up for four months, patient found to have normal menstrual flow with no other complaints, showing good outcome of this surgical procedure. **CONCLUSION:** Cervicovaginal atresia is treated by neocervix and neovagina formation by ileum . It is more beneficial as ileum having distensibility and self-lubricating nature so no need of post-operative serial dilatation. Ileum transposition is better than colonic because of good vascular supply of ileum, so ileao-cervicovaginoplasty can be a good surgical option in such cases.

MP 05 – 04**Iatrogenic ureteric injury following lumbar microdiscectomy: A neurosurgeon's nightmare**

Nitin Garg, Pankaj DR, Singh S, Devana SK, Mavuduru RS, Mandal AK

PGIMER, Chandigarh

Introduction: Iatrogenic ureteric injuries are seen commonly after urologic, gynecologic and colorectal surgeries. Ureteric injury following thoracolumbar spinal surgery remains a very unusual complication and never been reported following microdiscectomy. We report a case of ureteric injury following microdiscectomy, done for prolapsed intervertebral disc (PVD) lumbar spine which was initially managed by percutaneous nephrostomy and subsequently by Boari flap ureteroneocystostomy. **Material and methods:** A 44 year gentleman presenting with severe radicular left lower limb pain underwent microdiscectomy for paracentral PVD of L5-S1, via posterior left parasagittal approach. On post operative day two, he developed abdominal distension with retroperitoneal collection for which a percutaneous drain was placed which drained clear urine. RGP was done which showed a complete cut off of ureter at L5-S1 vertebral level. Left side percutaneous nephrostomy was done and flank drain removed once its drainage was minimal. **Results:** Six months later he was taken up for definitive surgery. Intra-operatively there was dense fibrosis and no ureteric tissue could be identified below the crossing of iliac vessels. Left side Boari flap ureteroneocystostomy with DJ stent placement was done. Post operative recovery was uneventful. **Conclusion:** Although an iatrogenic ureteral injury secondary to thoracolumbar spine surgery is rare, it should be included in the differential diagnosis for a patient presenting with post operative flank pain and abdominal distension. Prompt diagnosis with urinary diversion and appropriate corrective surgery at a later stage by an urologist will result in successful outcome.

MP 05 – 05**Management of Late Complications in Patients Undergone Primary Hypospadias Repair : A retrospective study**

Rajeev Kumar

SP Medical College, Bikaner

INTRODUCTION The surgical repair of primary hypospadias may result in late postoperative complications such as fistula, meatal stenosis, stricture,

and residual curvature. The main causes of these late surgical complications are postoperative infection, wound dehiscence, ischemia or necrosis of the tissue used for repair. **PATIENTS AND METHODS** A retrospective study of patients treated for late complications after hypospadias repair. Inclusion criteria were patients presenting urethral, corpora cavernosa deformity due to previous hypospadias repair. Referral patients from other centres were excluded from study. **RESULT** From 2005 to 2013, total 484 pts of primary hypospadias has been operated at our centre. Repair was done by TIP in 385, Theirsch duplex in 32, Mathew repair in 27, dartos flap repair in 11 and Modified ductet tube urethroplasty in 29. Late complications (Total 35) were fistula in 20, meatal stenosis in 4, stricture urethra in 3 and residual chordee in 8 cases. Successful repair was performed in 26 out of 30. **CONCLUSION** In the literature, failure rate of reconstructive surgery is 12- 25%. In our study, failure rate of repair was 13.33%. Adults with complications following childhood hypospadias repair are still a difficult population to treat with a high failure rate for reoperative surgery.

MP 05 – 06

Renal cell carcinoma in a transplanted kidney

Amit Agrawal, Srivastava A, Karan SC, Dhawan V

Army Hospital (R&R), New Delhi

Renal transplant is the treatment of choice for patients with end stage renal disease (ESRD) due to the improved quality of life. But lifelong immunosuppression increases the incidence of post transplant cancers. However, the occurrence of de novo primary renal cell carcinoma (RCC) in a grafted kidney is very rare. The diagnosis is often made incidentally during follow up ultrasound examinations. The treatment is either a partial nephrectomy or percutaneous ablation with close follow up for recurrence. However, sometimes a radical graft nephrectomy may be the only option forcing the patient back on dialysis. We report such a rare case in a 42 year old kidney transplant recipient who developed a RCC in the graft kidney after 5 years of transplant and was managed by a radical nephrectomy.

MP 05 – 07

Factors predicting early graft functioning in cadaver renal transplant

Divakar A, Karunamoorthy R, Vedhachalam K, Ilamparathy, Selvaraj V, Thiyagarajan K

Madras Medical College, Chennai

AIM: Renal transplantation is the treatment of choice for end stage renal disease. In this study we have analysed the factors responsible for the early graft functioning in cadaver renal transplants and the causes for delayed graft functioning. **MATERIALS AND METHODS** Prospective cross sectional diagnostic study. The study was conducted in our Department of Urology. All cadaver renal transplantation cases done between oct 2012 to August 2014 were included. Patients with a failed previous transplantation were excluded. **RESULTS** There was a total of 49 cadaver transplant cases. In the cadaver transplant group delayed graft function was present in 29 out of 49 patients. out of the 29, 8 patients had cold ischaemia time of more than 4 hours . 21 of the patients had significant hypotension in the intraoperative period and there was also 4 deaths in this group. **CONCLUSION** In conclusion , our study shows that delayed graft functioning is a independent prognostic factor to predict the long term graft survival . In our study we found out that prolonged cold ischemia time and significant hypotension both independently can produce delayed graft function .Hence every effort should be made to reduce the duration of cold ischemia in cadaveric transplantations as well as to avoid significant hypotension.

MP 05 – 08

Robotic Assisted Laparoscopic Kidney Transplantation in Children - An Initial Experience

Jayesh Modi, Pranjal Modi, Bipinchandra Pal, Suresh Kumar, Ramya Nagarajan, Yusuf Saifee

Institute of Kidney Diseases and Research Centre, Institute of Tansplantation Sciences, Ahmedabad

Introduction: To place adult size kidney for transplantation in children, a large incision is required. Here we present our initial experience of robotic

assisted laparoscopic kidney transplantation (RAKT) in five children. **Material and method:** Following IRB approval, in 2013 a total of five children underwent RAKT. Concomitant seminal vesicle cyst excision and nephrectomy was carried out in two children. All but one kidney were procured from living donor. **Operative procedure:** 30° Trendelenburg and lithotomy position was given and robot docked between two legs. Six ports including two for suction and for assistant are placed. Common iliac vessels in two cases and external iliac vessels in three cases were dissected. A 6 cm pfannenstiell incision was made to introduce kidney and ice-slush. Wound was closed and robot was re-docked. Vascular anastomosis was carried out using Gor-Tex CV 6 suture. Ureteroneocystostomy was performed without using stent. **Results:** Mean operative time for RAKT was 280 min (210-310 min). Cold ischemia time was 106.5 minutes in living donor cases and 14 hours in deceased donor case. Blood loss was 97.5 ml. Anastomosis time and total re-warming time were 47.8 (36-55 min) and 68 min(58-84 min), respectively. One patient had spontaneous rupture of graft on 3rd post operative day requiring emergency exploration. She had delayed graft function. In 4 children, mean eGFR was 116 (90-139 ml/m²) on 7th post operative day. **Conclusion:** RAKT in children is technically feasible and safe. Concomitant ablative surgery in pelvic cavity can be accomplished with help of robot at the time of transplantation.

MP 05 – 09

Learning curve of retroperitoneoscopic donor nephrectomy- how steep it is

Pal Bipin Chandra, Rizvi SJ, Modi PR

Institute of kidney diseases and research centre- Institute of Transplantation sciences, Ahmedabad

Introduction: Laparoscopic donor nephrectomy is the standard of surgery for the procurement of kidneys for transplantation. Retroperitoneoscopic donor nephrectomy is performed at few centres only. It is said that it has a steep learning curve. Here we present the learning curve of a single laparoscopic surgeon in RDN and discuss issues associated with it. **Methods:** Retrospective analysis of 59 RDN performed by a single surgeon between July 2012 to May 2014 was done. Eighteen (30.5%) were males and 41 (69%) were females in this study. Mean age was 44.8 yr. Mean BMI was 24.4 kg/m². Mean operative time was 210 min. Mean warm ischaemia time was 215.14 secs. Mean blood loss was 58.6 ml. 52(88.1%) had single artery while 17(11.9%) had double artery. Four donors had retroaortic renal vein while one had duplication of Inf. Vena cava. **Results:** Kidney could be procured in all the cases. Two cases required open conversion because of vascular injury. All the donors had smooth postoperative recovery and were discharged on day 2 of surgery. One donor developed a large retroperitoneal lymph collection which was managed conservatively. None had wound related morbidity. **Conclusion:** Retroperitoneoscopic donor nephrectomy does have a learning curve . Operative time reduced after performing 35 cases. Preliminary experience of retroperitoneoscopic surgery is desirable. Naive laparoscopic surgeons may have steeper learning curve.

MP 05 – 10

Duplication of inferior vena cava in retroperitoneoscopic donor nephrectomy- challenges and outcome

Pal Bipin Chandra, Rizvi SJ, Modi PR

Institute of kidney diseases and research centre- Institute of Transplantation sciences, Ahmedabad

Introduction & Objectives: Laparoscopic donor nephrectomy has been established as the standard of surgery for the procurement of kidneys. At most transplant centres preference is given to the kidneys having simpler vascular anatomy for laparoscopic donor nephrectomy. With the availability of better imaging facility Lap. Donor nephrectomy has been extended in cases having complex vascular anatomy too. Here we present a series of four cases having duplication of Inferior venacava and discuss the challenges encountered and the outcome in such cases. **Methods:** Out of 1180 retroperitoneoscopic donor nephrectomy performed at our institute we retrospectively analysed data of four donor who had infrarenal duplication of the IVC. The mean age of the donors was 41.5 years(range 30-54 yrs. Mean BMI was 26.5 (range25-28.6). Mean operative time was 176.7 minutes(Range-105-302 minutes). Mean WIT was 150 secs (range 108-230 secs.). **Results:** The operative time and the warm ischaemia time were

comparable to other RDN. None of the donors required open conversion. Recipient surgery was successfully carried out in all the cases. One donor had lower limb swelling in the followup which settled over a period of time. Conclusion: Retroperitoneoscopic donor nephrectomy is safe, feasible although challenging in donors having duplication of IVC.

MP 05 – 11

Surgical complications of renal transplant: single centre, single surgeon experience

Sam Thampan, Ashish S Nair, Shailendra Shukla, Vikas Kumar, Vasudevan S

Government Medical College, Trivandrum

Chronic renal failure needs substitutive treatment such as haemodialysis and peritoneal dialysis for the patient to survive. Kidney transplantation improves survival of the patient with chronic renal failure. Since the first kidney transplantation, performed by Merrill in Boston in 1959, advances in medical therapy, immunosuppressive therapy and refinements in surgical technique have improved the quality of life of the transplant patient. We present a review of the incidence, diagnosis and therapy of surgical complications of patients who underwent transplantation between 2011 and 2014. Objectives: To analyze the short term and long term surgical complications related to renal transplant in patients who underwent live donor as well as deceased donor renal transplant done between 2011 and 2014. To analyze the outcome of various surgical as well as minimally invasive interventions done and to look for the effect on the overall survival as well as graft survival independent of the medical causes of graft failure. Materials and methods: The study is conducted in Government Medical College, Trivandrum and included patients who underwent transplant between 2011 and 2014 done by a single surgeon. The mean duration of follow up was 18 months (2-44 months). The number of patients included in the study was 78. The patients were followed up on regular basis at the nephrology department and data was collected by personal interview as well as from the records available with the patient and the transplant registry. Results: The study showed that the detection, accurate diagnosis, and timely management of surgical complications occurring after kidney transplant are important tasks of the team managing these patients. A delay in the diagnosis or management of these complications can result in significant morbidity to the recipient, with risk of graft loss and mortality. Most surgical complications involve either the wound or one of the three anastomoses (renal artery, renal vein, or ureter). Examples include wound infection, renal artery or vein thrombosis, and urine leak. Most of these complications required surgical or radiologic intervention for appropriate management.

MP 05 – 12

Effect of perfusate solution on early graft function in live donor renal transplantation

Sandeep R Nath, Appu Thomas, KV Sanjeevan, Ginil Kumar, Georgie Mathew, Balagopal Nair, Kannan Nair

Amrita Institute of Medical Sciences and Research Center

INTRODUCTION In India, more than 90% of the renal transplants are from living donors as compared to the West, where living donor pool constitutes about 20-25% only. The objective was to study the effect of perfusate solution on early graft function in live donor renal transplantation. STUDY METHODS Total of 50 patients were included, allocated as two groups. Group I – patients whose graft were perfused with HTK and group II were RL was used. Early graft function was measured by the fall in serum creatinine in the post operative period and time taken to reach the nadir creatinine value post transplant. RESULTS Mean age of donor was 46.1 yrs. Mean age of recipient was 38.7 yrs. Mean warm, re-warm and cold ischemia times were 8.1, 51.6 and 85.5 minutes. 25 patients in Group I and rest 25 in group II. Further follow up shows no difference at one month serum creatinine. DGF was seen in 2 patients in the Group II. AMR was seen in 1 patient in Group 1 and two in Group 2. We observed that the nadir serum creatinine and time taken to reach nadir creatinine value was increased in the Group II. CONCLUSION Ringer lactate is a satisfactory solution as a perfusate in live donor renal transplantation in cases where the warm ischemia is less than one hour and where cold ischemia is less than 85 minutes. However the use of RL in multiple vessels and previous

failed transplantations need to be studied.

MP 05 – 13

Effect of donor kidney weight and volume on the early graft function in live donor renal transplantation

Sandeep R Nath, Appu Thomas, KV Sanjeevan, Ginil Kumar, Georgie Mathew, Balagopal Nair, Kannan Nair

Amrita Institute of Medical Sciences and Research, Kochi

INTRODUCTION Donor kidney weight has an influence on the long term graft function, as proved by literature from the West. Graft volume has also been studied by few authors based on imaging studies. The true volume of the kidney and its association with early graft function has not been reported in literature. Hence the objective was to study relation of the donor kidney weight and volume with early graft function in live donor renal transplantation. MATERIAL & METHODS : Was undertaken from May 2013 to June 2013 in AIMS Cochin. Total of 30 patients were included. The patients were allocated as two groups. The donor kidney was weighed on a calibrated electronic weighing scale and weight was recorded in milligrams. Kidney volume was assessed by fluid displacement method, immersing it in a beaker contained 500ml ice cold saline and then measuring the fluid displaced in milliliters. RESULTS Mean warm, re-warm and cold ischemia times were 8.5, 50.2 and 82.5 minutes. 14 patients in Group I and rest 16 in group II. Further follow up shows no difference at one month serum creatinine. Mean kidney weight and volume were 121.5grams and 105.7ml. CONCLUSION Both kidney weight and volume is a good indicator of the early graft function. The true volume measured is the accurate value of the kidney volume. The ratio of kw to Bw may be beneficial in assessing the early graft function, however in it does not have a significant effect on the long term function.

MP 05 – 14

Managing bladder dysfunction in renal transplant patients

Shelke UR, Patwardhan SK, Ismail MA, Kini S L

Seth GS Medical College & KEM Hospital, Mumbai

INTRODUCTION & OBJECTIVES Bladder dysfunction if left undiagnosed and untreated, can lead to graft dysfunction post renal transplantation. Patients with voiding symptoms undergoing renal transplant, need evaluation with voiding diary, uro-dynamic study(UDS), micturating cystourethrogram(MCU), renal scans and managed accordingly and investigations repeated as per need. MATERIAL & METHOD Eight patients undergoing renal transplant, presented with voiding dysfunction. These were evaluated with history, examination, voiding diary, MCU and UDS pre and post-transplant. Patients were followed up and investigations repeated as per need. RESULT Three patients with PUV underwent workup, depending on the findings they were managed with anticholinergics, alpha-blockers. Clamcystoplasty was done for low compliant, small capacity bladder in one patient. Post-transplant, one patient developed repeated episodes of pyelonephritis and maintained significant PVR, bladder neck incision (BNI) was done and mean creatinine of 1.5 mg/dl achieved. Two male patients, aged 13 and 34 with diabetes mellitus had low voiding detrusor pressure, increased PVR, were started on alpha-blockers. Postoperative one patient developed pyelonephritis, was managed conservatively and advised double voiding, with no recurrence. Three young male patients in their late 20s, had low compliant bladder, high detrusor pressure, and significant PVR, were started on anticholinergics and alpha-blockers. Post transplant one patient underwent BNI for maintaining PVR and low flow rate. CONCLUSION Literature shows varying results in outcome in patients with voiding dysfunction. Long term renal graft dysfunction has been reported in some reports. Our patients had increased incidence of pyelonephritis, with raised creatinine for which monitoring with UDS, medical management and surgical intervention was required and graft preserved.

MP 05 – 15

Outcomes of dorsal, ventral and dorsolateral buccal graft onlay urethroplasty in bulbar urethral strictures

Kanodia Gautam, Singh BP, Sankhwar SN, Kumar Manoj, Singh Siddharth, Bansal Ankur, Patodia Madhusudan

King George's Medical College, Lucknow

INTRODUCTION AND AIM: Long bulbar urethral strictures (> 2 cm) are not amenable to stricture excision and primary anastomosis, as this can result in shortening of the urethra and the formation of chordee. These strictures are best treated by a substitution urethroplasty technique. Multiple locations and approaches for the Buccal mucosa graft placement have been described with reasonable success. The graft can be placed on the ventral, lateral or dorsal site according to the surgeon's experience and preference. We performed a retrospective analysis of Outcomes of dorsal, ventral and dorsolateral buccal graft onlay urethroplasty in bulbar urethral strictures. **METHODS:** It is a Retrospective study done between July 2010 and September 2013. Total 105 patients were included in the study out of which 12 patients excluded because of follow up period less than 12 months. Adult male (>18 yr) with Bulbar urethral stricture and caliber of urethra \geq 6 Fr were included in the study. Preoperative evaluation consisted of clinical history, Physical examination, Urine culture, Uroflowmetry, Post void residual urine measurement, Retrograde and voiding cystourethrography, and urethroscopy. Follow up was done at 3,6 and 12 months after urethroplasty. **RESULTS:** Overall success rate was similar at mean follow up of 12 months. **CONCLUSIONS:** Despite equal success rate due to robust blood supply of bulbar urethra, DLBMG and VOBMG can be considered over DOBMG in view of more anatomical repair with less dissection. However In long term it is to be seen whether one is superior to the other.

MP 06 – 01

Post catheterisation urethral stricture- recent trends in occurrence; safety tips of catheterisation

Mitra Nilanjan, Saha Barun Kumar, Mukhejee Subhabrata, Sinha Rajan Kumar, Sharma Pramod Kumar, Mondal Soumendranath, Karmakar Dilip

Calcutta National Medical College, Kolkata

Introduction and Objectives: Urethral Stricture Disease encompasses spectrum of divergent ailments that cause obliteration of urethral lumen blocking urinary flow, secondary to fibrosis and healing of urethral mucosa and surrounding tissues. Common causes of stricture are urethral trauma, infections including STD or damage from instrumentation which includes perurethral catheterisation. Aim of the study is to determine incidence of urethral stricture occurring as a result of previous per-urethral catheterisation and site of occurrence. **Methods:** All patients admitted from the period of March 2012 to September 2013 were evaluated about their etiology. Post-catheterisation cases were further assessed which included clinical data, urine analysis, uroflowmetry, retrograde and voiding cystogram and cystourethroscopy. **Results:** 18 patients (16.36%) were evaluated to have post catheterisation urethral stricture out of 110 patients attending the OPD. 5 patients underwent catheterisation for standard monitoring purposes during and after major abdominal surgeries, 2 following coronary artery bypass graft, 3 patients following neurosurgery and 8 following catheterisation after admission with medical ailments. 11 patients had stricture of the bulbar urethra and 7 had stricture of penile urethra. 4 patients (22.22%) had short segment (<1.5 cm) and 14 patients (77.78%) had long segment (>1.5 cm) stricture of which 3 patients had pan-urethral stricture. **Conclusion:** Post catheterisation stricture is common and every attempt should be made to prevent this. Finally a short discussion after review of literature will be made on safety tips of catheterisation and effect of different substances of which Foley's catheter is made on urethral mucosal lining.

MP 06 – 02

Is antegrade access safe and effective in bladder tumour with inaccessible urethra

Aashiq Hussain, Abdul Rouf Khawaja, Tanveer Iqbal, Javeed Magray, Arif Hameed, Saleem wani, Baldev Singh

Sheri Kashmir Institute of Medical Sciences Soura Srinagar

INTRODUCTION: Inaccessible urethra either due to multiple/diffuse stricture or Multiple urethrocuteaneous fistulas post urethral instrumentation (TURBT with TURP) is a rare entity. Management of such a case with a bladder tumour for TUR BT/ surveillance cystoscopy

poses a great deal of challenge. **AIMS AND OBJECTIVES** To assess the safety and efficacy of SPC in bladder tumours with inaccessible urethra. **MATERIAL AND METHODS** We present three cases of bladder tumor with inaccessible urethra, two due to multiple strictures(TURBT+TURP) and one due to urethrocuteaneous fistulas(TURBT) who presented to our emergency department with acute urinary retention and SPC was inserted to tide over emergency. These patients were followed with bladder screening/ re TUR BT via SPC / perineal urethrostomy site with biopsy from SPC tract was negative in all the three cases. SPC tract biopsy was taken after an interval of 1- 2 months. **OBSERVATION AND RESULTS** All cases are on our follow up (average 12 months) and are doing well till date. Although there is a theoretical risk of tract site tumour seedling, in our follow up none of the patients had such complications. **CONCLUSION** SPC is an effective, cheap and safe mode of access in bladder tumours with difficult urethral access for their management/ screening. It allows us to effectively screen the bladder using cystoscope and cytology, and also for instilling intravesical chemotherapy. However with very few cases it will be premature to draw a conclusion.

MP 06 – 03

Radical cystectomy and urinary diversion : a single center experience

Amaresh Chandra Pattanayak, Choudhuri S, Mishra JJ, Panda SS, Singh GP, Hota D

SCB Medical College & Hospital, Cuttack

We present the outcomes of patients treated with radical cystectomy and pelvic lymphadenectomy in our center. **Materials and Methods:** A total of 46 patients underwent radical cystectomy (RC) for bladder cancer from Feb 2010 till Feb 2014. Of these, 34 patients with primary transitional cell carcinoma of bladder underwent RC with bilateral pelvic lymphadenectomy and ileal conduit with a curative intent. Four cases radical cystoprostateurethrectomy with ileal conduit for squamous cell carcinoma and 8 cases with orthotopic urinary diversion. The clinical course, pathologic characteristics and long-term clinical outcomes were evaluated in this group of patients. **Results:** The follow-up was 36 months. There were 2 (4.3%) perioperative deaths and 6(13%) early complications. The recurrence-free survival (RFS) and overall survival (OAS) were 64% and 90% at 4 years. The RFS and OAS were significantly related to the pathological stage and lymph node status with increasing pathological stage and lymph node positivity associated with higher rate of recurrence and worse OAS. A total of 16 patients (34.7%) developed bladder cancer recurrence. Of these, 7 (15.2%) developed local pelvic recurrence and 9 patients (19.5%) developed distant recurrence. Pathological subgroups include 24 patients (52.1%) with organ-confined node-negative tumors, 10 (21.7%) with extravesical node-negative tumors and 12 (26%) with lymphnodal involvement. **Conclusion:** The clinical results reported from this group of patients demonstrate that radical cystectomy with ileal conduit or orthotopic neobladder in selected patients provides good survival results for invasive bladder cancer patients with low incidence of pelvic recurrence.

MP 06 – 04

600 Grams Prostate: A Rare Case of Non-Hodgkins Lymphoma

Anoop K Sankar, Vikram Nimboor, Yunus K K, Manu M K, Nazar M

Government T D Medical College, Alappuzha, Kerala

INTRODUCTION: Malignant lymphoma of the prostate is quite rare. Non-Hodgkin's lymphoma (NHL) is commoner than Hodgkin's lymphoma. Just as in this reported case, its diagnosis often comes as a histological surprise. **METHODS:** Case description: After a month long obstructive and irritative lower urinary tract symptoms, an 80 year old emaciated patient presented to us with acute urinary retention as well as severe constipation. He gave history of significant weight loss and loss of appetite in the preceding 3 months along with off and on fever with chills, more so in the night. There was a firm well defined 3 cm lymph node in the right inguinal region. On digital rectal examination (DRE) the prostate was firm and grossly enlarged – the upper border could not be palpated. Serum prostate specific antigen (PSA) was normal. Ultra sonogram of the abdomen reported the size of prostate as 600 grams. Contrast enhanced computed tomography

of the abdomen was taken to better delineate the lesion and to define its extent, which confirmed the lesion to be confined to the prostate. There was no significant lymphadenopathy, other than the inguinal. RESULTS: A transectal core needle biopsy of prostate was taken which was reported as non-hodgkins lymphoma (Leukocyte common antigen positive; cytokeratin and chromogranin negative). Patient was started on 'Cyclophosphamide, Adriamycin, Vincristine and Prednisolone' regimen. Yet, he succumbed to the disease in 6 months. CONCLUSION: Lymphoma should be kept as a differential in unusually large prostate. Even if there is no suspicion of malignancy in DRE and a normal PSA, a large prostatic mass warrants biopsy. NHL of prostate, which usually affect the elderly, carries a poor prognosis

MP 06 – 05

Urethral and ovarian metastasis of renal clear cell carcinoma - a rare presentation

Arun Makkar, R Sood, Nikhil Khattar, Raman Tanwar

PGIMER Dr RML Hospital , New Delhi

Introduction: A large portion of renal cell cancer patients have metastatic disease at initial presentation. A rare case of simultaneous urethral and ovarian metastasis of clear cell carcinoma of the kidney is described herein. This is the seventh case of urethral involvement in renal carcinoma. Methods: A 63 year old lady who underwent laparoscopic radical nephrectomy 11 months earlier presented with a rapidly enlarging mass arising from the urethra, causing difficulty in passing urine. The patient was on targeted therapy for multiple metastases in the liver, ovaries and pelvis. Results: The urethral mass was excised under local anaesthesia and histopathology revealed the presence of clear cell carcinoma. Conclusion: Urethra and ovaries are both rare sites of metastasis for renal carcinoma. Simultaneous ovarian and urethral involvement has not been reported previously.

MP 06 – 06

B/L metachronous renal cell carcinoma with liver secondary: a rare case of long survival post renal transplant a case report

Baghel Ashutosh, Chally R, Azeez AVA, Chally P, Mohanan K

Baby Memorial Hospital, Calicut

Introduction Renal cell carcinoma (RCC) accounts for approximately 3% of adult malignancies and 90-95% of neoplasm's arising from the kidney. We report a rare case of metachronous renal cell carcinoma with liver secondaries who underwent renal transplantation at our centre and had a long survival post transplantation. Materials and Methods A 40 year old patient presented with recurrent hematuria with clots x 6 months in Nov 1997 Diagnosed to have right renal tumor. Right radical nephrectomy in Dec 1997 HPE: renal cell carcinoma clear cell . Recurrence free period: 10 months developed lobulated soft tissue mass in region of pancreatic head s/o recurrence /lymph nodal mass. Abdominal exploration : sep 1998. Mass :scarred tissue. After follow-up of 8 years: left renal tumor with renal vein thrombosis., perinephric spread with para-aortic lymphadenopathy so Left radical nephrectomy in Oct 2005. HPE: RCC clear cell variety with invasion of renal capsule, sinus and renal vein. Lymph nodes free of tumor. Nuclear grade ii/iv. Tumor size 11 cm. (T3aN0M0) . Hemodia:ysis for 1 year. Successful renal transplant in Aug 2006. 2 yrs post transplant mass lesion of size 5.4x3.4x2.9 cm in segment VIII of liver. Rt hepatectomy in 16.4.2008. Asymptomatic with good graft function. Presently On regular follow up. Conclusion Renal cell carcinoma recurs in 20% to 40% of patients with clinically localized disease post-nephrectomy and most recurrences occur in the first 3 years. There is uncertainty in the literature regarding the prognosis of metachronous bilateral RCC. There are no case series regarding survival of patients with b/l metachronous RCC with renal transplant.

MP 06 – 07

Role of second look transurethral resection (TUR) in patients with T1 nonmuscle invasive bladder cancer: our institutional experience

Goyal S, Sen TK

Sri Satya Sai Institute of Higher Medical Sciences, Puttuparthi

Introduction and objectives-To evaluate the usefulness of a second transurethral resection in patients with T1 non-muscle invasive bladder cancer. Evaluation of second-look transurethral resection (TUR) is essential for avoidance of staging errors as upto 25-30% cases may get upstaged on repeat resection in T1 tumours. Study methods-All patients with T1 bladder tumor on histopathology report who underwent TURBT between January 2012 to July 2014 were included. A uniform management protocol was followed and all patients underwent second-look TUR within 4 to 6 weeks after the initial resection. Histopathologic findings of the second TUR of bladder tumor (TURBT) were compared with those of the initial one. Results- 81 patients underwent TURBT and were staged T1 on histopathological analyses. Among those 74 cases underwent second-look TUR and were finally included. 40 cases were staged as T1G1 and 34 cases were T1G3. Among 34 T1G3 cases, 20 cases had muscle included in the specimen in 1st TURBT, among which 6 cases got upstaged on relook TURBT. 14 cases were without muscle in the specimen in initial TURBT and upstaging was seen in 11 cases on subsequent TURBT. (overall upstaging seen in 44% cases of T1G3). Among 40 T1G1 cases, 27 cases had muscle included in the specimen in first TURBT, among which upstaging occurred in 3 cases on relook TURBT. 13 cases were without muscle in the first TURBT specimen and upstaging was noted in 4 cases on relook TURBT. (overall upstaging seen in 17.5 % cases of T1G1) Conclusions: Second-look TUR is a valuable procedure for accurate staging of T1 nonmuscle-invasive bladder cancer. It changed the treatment strategy of a significant proportion of our patients which was even more pronounced in those with a higher grade of tumour on initial TURBT.

MP 06 – 08

Rare case of Extramedullary Plasmacytoma

Gyvi Gaurav, P Prabhu, N Ragavan, S Kanekar, A Bhat

Apollo Hospitals, Chennai

Renal plasmacytoma, a subset of extramedullary plasmacytomas (EMP), is an extremely rare clinical problem with only 25 cases reported in literature. It presents many diagnostic challenges owing to its unusual presentation. Case report A 34 year old man presented with a large right sided intra-abdominal mass. Contrast enhanced computerized tomography (CECT) revealed multifocal, various sized, heterogeneously enhancing soft tissue mass lesions in right kidney with kidney completely replaced by the mass. The largest lesion measured 10cmX11cmX12cm with significant local mass effect to adjacent retroperitoneal structures. There was no lymphadenopathy and no synchronous lesion in the rest of the renal tract. Metastatic and hemopoietic work up preoperatively was normal. On exploration, the renal mass was found to be unresectable due to dense adhesions with the duodenum and infiltration into the pancreas. A biopsy was taken from the mass and further procedure deferred. The pathological examination revealed sheets of plasmacytoid cells with coarse chromatin, pink cytoplasm and perinuclear halo, consistent with features of renal (extra-medullary) plasmacytoma. Subsequent work up did not reveal systemic plasma cell disease. The patient was managed further by the Hematologist. Large renal masses with unusual presentation should raise suspicion of hemopoietic malignancies of urinary tract. The present study also presents a review of literature. EMP has a relatively good prognosis with follow-up recommended for early detection of relapse or progression.

MP 06 – 09

A rare case of bladder lymphoma

Jyothish A, Vishnu R, Anish K P, Kiran S, Rajanikanth V S, Chandrasenan N Sivaramkrishnan P

Government Medical college Hospital, Thiruvananthapuram

INTRODUCTION Lymphoma of the bladder is a very rare entity. It constitutes about 0.2 % of primary lymphomas and 1.8% of secondary lesions of a malignant lymphoma. Most common primary lymphoma of bladder is extranodal mucosa associated lymphoid tissue (MALT) lymphoma followed by diffuse large B-cell lymphoma. CASE HISTORY A 73 year old gentleman presented with history of frequency and urgency of one year duration. There was no history of hematuria or obstructive lower urinary tract symptoms (LUTS). Cystoscopy revealed a small capacity bladder with ill defined sessile lesions. Biopsy taken from bladder revealed a diffuse mixed

small and large B cell lymphoma. Immunohistochemistry was positive for CD 20 and BCL 6. Computerized Tomographic (CT) scan of abdomen and pelvis showed diffuse bladder wall thickening and bulky paraaortic and pelvic lymph nodes. CT evaluation of the thorax was normal. The patient was started on R-CVP (Rituximab Cyclophosphamide, Vincristine and Prednisolone) regime. CONCLUSION Diffuse mixed small and large B cell lymphoma of the bladder is a very rare entity that has shown good response to chemotherapy. Hence a high index of suspicion and early diagnosis holds the key to treatment and thereby, survival of these patients.

MP 06 – 10

Primary extramedullary myeloid tumor of testis: a rare entity

Kuanr DR, Mavuduru RS, Mandal AK, Singh SK

PGIMER Chandigarh

INTRODUCTION and OBJECTIVE : Extramedullary myeloid tumors also known as chloromas, myeloid sarcomas, granulocytic sarcomas, are rare solid tumors comprising of immature cells of myeloid lineage .These tumors are commonly associated with acute myeloid leukemia. Primary extramedullary myeloid tumor of testis without pre-existing or concomitant diagnosis of leukemia is a very rare entity. **METHODS:** A 24-year-old man presented with gradually increasing painless right testicular mass for six months. Serum alpha fetoprotein and β HCG levels were in normal range and serum lactate dehydrogenase was elevated. Total leukocyte count was normal. No blastic cells were present in peripheral blood . Ultrasonography revealed a welldefined 4x3cm mass in right testicle with normal contralateral testicle. The patient underwent right radical orchidectomy. **RESULTS:** Histopathological analysis revealed a tumor with large areas of hyalinisation with tumor cells that were 3-4 times larger than mature lymphocytes. Immunohistochemistry (IHC) stain for myeloperoxidase (MPO), CD20 showed strong cytoplasmic positivity. Staining for cytokeratin, desmin, myogenin were negative. Overall features were consistent with extramedullary myeloid tumor . Bone marrow biopsy revealed no evidence of infiltration by immature cells. Patient was started on induction chemotherapy with Cytarabine. **CONCLUSIONS:** Primary extramedullary myeloid tumors are rare tumors of testis and should be taken into consideration in the differential diagnoses of undifferentiated neoplasia. IHC is helpful in making a rapid diagnosis. Acute leukemia usually manifests shortly after the appearance of extramedullary myeloid tumors (range 1–18 months). Therefore, these tumors are considered initial manifestations of acute leukemia, rather than a localized process and chemotherapy is the treatment of choice in such cases.

MP 06 – 11

Renal cell carcinoma presenting as a testicular mass

Madduri V K S, Choudhury S, Ghosh B, Pal D K, Bera M K

IPGME & R and SSKM Hospital, Kolkata

The usual sites of metastases from Renal Cell Carcinoma (RCC) are lung, bone and lymph nodes. RCC metastasizing to the testis is very unusual, with only anecdotal case reports in literature. Here we present a rare scenario where a man presented with only a painless enlargement of left testis and no other complaints. Further workup revealed a synchronous left sided renal cell carcinoma. The salient points in the management of this case and the relevant literature is discussed.

MP 06 – 12

Renal lymphoma mimicking as pyelonephritis: an unusual case report

Mittal A, Singh SK, Sharma AP, Lal A

PGIMER, Chandigarh

Introduction Renal lymphoma is always secondary to systemic disease, more commonly from hematogenous dissemination or contiguous extension from retroperitoneal disease. Clinically patient may presents with flank pain, hematuria, abdominal mass, and fever and weight loss. Most commonly encountered pattern is bilateral renal mass (60%). We hereby present a case of renal lymphoma with unusual clinical and radiological presentation mimicking pyelonephritis and psoas abscess. Case Report A

68 year hypertensive male presented with complaints of fever, pain in right groin and knee for past 15 days and was found to have mild right hydronephrosis (HDN) and an elongated 12.6x9.6 x8.0 cm mass along the course of right psoas muscle. CECT abdomen revealed enlarged right kidney with thickening and enhancement of walls of pelvicalyceal system and upper ureter, mild HDN with perinephric fat stranding. Multiple enlarged lymphnodes encasing right renal vessels and in retrocaval region. Right psoas muscle was bulky with heterogenous enhancement and cystic areas. All features were suggestive of pyelonephritis. USG guided FNAC from the retroperitoneal lymph node, right kidney and right psoas muscle showed atypical large lymphoid cells 3-5 times the size of mature lymphocytes, consistent with non hodgkin lymphoma (NHL). Bone marrow showed infiltration by NHL with CD 20 marker positive. Patient was started on R-CHOP chemotherapy. Conclusion Renal lymphoma due to its infiltrating growth pattern may mimic as acute pyelonephritis with psoas abscess. Such features delay the diagnosis of underlying NHL. Therefore should be kept as a rare differential.

MP 06 – 13

Transdiaphragmatic approach for wedge resection of the solitary lung metastasis

Mittal Varun, Mandhani Anil, Kapoor Rakesh, Srivastava Aneesh, Ansari M S, Patidar Nitesh, Arora Sohrah

SGPGIMS, Lucknow

Introduction and Objective: Five year survival of patients undergoing complete resection of metastatic disease in renal cell carcinoma (RCC) may range from 35% to 50%. Traditionally, thoracotomy has been described to remove the lung metastasis. Herein we report the transdiaphragmatic approach. **Methods:** A 60-year-old man with good performance status underwent computed tomography scan which showed a right renal mass with synchronous solitary lesions of liver in segment 6 (4.3X4.1X3.8 cm) and right lower lobe of lung (2.0X1.5 cm). There was no evidence of lymphadenopathy or any other lesion on FDG-PET scan and the left kidney was normal. Patient was planned for thoracotomy so one lung anesthesia was given. As renal tumor was attached to the diaphragm, it was opened while removal of the tumor. Diaphragm tear was enlarged and lung lesion was resected and sutures were placed trans-diaphragmatically. Chest tube was left in. **Results:** There were no intraoperative and postoperative complications. The pathologic findings of the renal mass was clear cell carcinoma, Fuhrman grade III, extending into perinephric tissues and pelvicalyceal system but not beyond Gerota's fascia. The section from liver and lung lesions showed similar morphology with negative surgical margins. Patient is doing well at 4 months of follow up. **Conclusions:** Transdiaphragmatic resection of peripheral lung metastasis could be considered electively as an alternative approach in selective cases of RCC with metastases.

MP 06 – 14

Primary malignant melanoma of urinary bladder

Nayak S V, Nagaraja N H, Srinivas J, Nipun A C, Narendra J

Institute of Nephro Urology Bangalore

Introduction and Objective Primary malignant melanoma of the genitourinary tract is a rare lesion, accounting for only 0.2% of all melanomas. The urethra and penis are the most frequent sites of origin. The bladder has been infrequently reported as a primary site. As far as we know 20 cases have been reported worldwide. We present our case-report of primary melanoma of the bladder. **Methods** A 56 year old female presented with total painless hematuria of 6 months duration. Her general and systemic examination was normal. Routine investigations were normal. Ultrasonography and computed tomography (CT) of abdomen and pelvis showed bladder mass arising from right lateral wall and right half of base of bladder with no extravescical extension. She underwent transurethral resection of bladder tumor. Cystoscopy revealed a broad based tumor on right lateral wall and base of bladder with perilesional blackish pigmented areas. Results Histopathological features and immunohistochemical studies favored the diagnosis of malignant melanoma of bladder. She had no history of cutaneous melanoma. Dermatologic, ophthalmologic and gynaecologic evaluation was negative. Upper gastrointestinal and colorectal studies were negative. The abdominal, chest and brain CT scans were normal. Final

diagnosis of primary melanoma of bladder was made. Patient refused radical cystectomy and had no recurrence at 3 months check scopy. Conclusion Melanoma of the bladder is most commonly secondary presentation of patients with widespread metastatic melanoma originating from skin. Primary melanoma of the bladder is extremely rare and all the criteria reported by Ainsworth should be met to confirm the diagnosis.

MP 06 – 15

A rare case of paratesticular leiomyosarcoma

Nithya R, Anish KP, Vishnu R, Kiran S, Rajanikanth V S, Chandrasenan N, Sivaramakrishnan P

Government Medical college Hospital, Thiruvananthapuram

INTRODUCTION Paratesticular sarcoma is an extremely rare tumor. Prevalence of paratesticular soft tissue sarcomas is around 0.8% of all soft tissue sarcomas. Rhabdomyosarcoma is the most common paratesticular sarcoma followed by leiomyosarcoma. Around 100 paratesticular leiomyosarcomas have been reported in the literature so far. Paratesticular leiomyosarcoma is an aggressive tumor with 30% recurrence, 30% distant metastasis and 30% mortality at 4 year follow up. **CASE REPORT** A 48 year-old man presented with a painless left scrotal mass. Tumor markers for testicular malignancy were negative. Ultrasonogram showed a mass in the upper pole of left testis. Contrast enhanced computed tomography revealed a heterogeneously enhancing extratesticular mass. Metastatic workup was negative. Left radical orchiectomy was performed. The histopathological examination of the resected specimen revealed low grade leiomyosarcoma with clear surgical margins. Immunohistochemistry showed vimentin and SMA positivity and was negative for S100. Considering the large size and aggressive behaviour of the tumor, patient was given adjuvant chemotherapy with Ifosfomide and Adriamycin. **CONCLUSION** Although leiomyosarcoma is a rare tumor, it should be considered an important differential diagnosis for paratesticular tumor. Radical orchiectomy and subsequent long term follow up is the standard of care. There is no consensus regarding adjuvant therapy and follow up of this condition. Considering the aggressive behavior and significant mortality, patients may benefit from adjuvant therapy.

MP 07 – 01

Epidemiological study of urological malignancy in younger age group

Partha Protim Mondal, Rajendra Prasad Roy, Rajkumar Singha Mahapatra, Dilip Pal

IPGMER, Kolkata

Cancer is a major problem in developing countries like India who are with limited resources to cope with it. This study dealt with the urological cancers involving; renal, renal pelvis and ureter, urinary bladder, prostate and penile cancers. Urological cancers are becoming a major problem in both men and women, and the most affected age group is between 51-70 years. But it is not rare in younger age (<50 years) group and detected early with the advent of modern imaging modalities. **OBJECTIVES** Our objective is to study the various clinical presentations, etiological causes and histological variation of urological tumour to better understand the disease characteristics and to serve as a source for future reference in a tertiary care Hospital. **METHODS** It was a prospective observational study conducted at IPMER Hospital adult urological wards to patients whom were admitted due to urological symptoms and signs for the period of April 2013– Nov 2014. The study was performed through personal interviews, by structured questionnaires, investigated by Ultrasonography of Abdomen, CT Scan, MRI, Chest X-ray, CT guided FNAC (selected cases), various biochemical Tests (when indicated - serum PSA), Histopathology of surgical excisions, trucut and fine needle biopsies of kidney, prostate, urinary bladder, and penis. **RESULTS** A total of 80 patients were interviewed, among those bladder cancer were 42(53%), renal cancer 27(34%), penile cancer 4(5%), renal pelvis and ureteric cancer 2(2%), prostate cancer 5(6%). The mean age of patients was 41.4 years, with the range of 7-50 years. The male to female ratio was 2.5: 1 **CONCLUSIONS** According to above data bladder cancer was the commonest cause of admission, closely followed by renal cancer. The commonest histology for bladder cancer was transitional cell

carcinoma (93%), other types accounting for 7%. Renal cancer were; clear cell carcinoma 81%, other types showed 19%. For renal pelvis and ureteric carcinoma – transitional cell carcinoma 100%. Penile cancer- squamous cell carcinoma 100%. Prostatic cancer – adenocarcinoma 100%. Majority of these patients came with advanced stage, which gave big challenges for their management.

MP 07 – 02

Two cases of adult female exstrophy with Squamous Cell Carcinoma; Clinico-Pathological spectra of presentation

Rakesh BH, Prabhu Laxman GG, Shetty Ranjit, Venugopal P, Sanman KN, Gurucharan M, Reddy Rajesh

Kasturba Medical College & Hospital

Objective: The incidence of bladder exstrophy has been estimated to be 1 in 10,000 to 1 in 50,000 live births with male-to-female ratio of 2.3:1. The presentation of exstrophy in adult life is rare and the malignant potential of the exstrophied bladder mucosa is well known. 95% are adenocarcinomas, and 3% to 5% are squamous cell carcinomas. We report two cases of adult female exstrophy with squamous cell carcinoma. **Patients and methods:** Patient A: 47 years old spinster with intermittent bleeding from exstrophied bladder and perineal mass. Patient B: 60 years old with cauliflower like growth from the exstrophy bladder and foul smelling discharge. Both underwent radical cystectomy with abdominal hysterectomy and primary closure of the abdominal wall and urinary diversion. Their biopsies were reported to be adenosquamous carcinoma of the bladder with infiltration of the muscular wall (Patient A) and keratinizing squamous cell carcinoma in exstrophy bladder (Patient B). Patient A was doing well during early follow up, but was subsequently lost. Patient B is leading a normal social life with regular follow up. **Conclusion:** The malignant potential of the exstrophied bladder mucosa is well known, with chronic irritation and infection leading to the metaplasia. The treatment of squamous cell carcinoma [SCC] of urinary bladder remains similar to transitional cell carcinoma [TCC]. The gold standard of treatment of SCC of bladder is radical cystectomy with no established guidelines for any adjuvant or neoadjuvant therapy. Our 60 years old patient also represents the oldest female case with adult exstrophy.

MP 07 – 03

Paratesticular leiomyosarcoma following radiation therapy for carcinoma prostate: Case report and review of literature

Priyank Bijalwan, Ginil Kumar, Appu Thomas, Balagopal Nair

Amrita Institute of Medical Sciences, Kochi

Soft tissue sarcomas of the genitourinary tract are rare. Paratesticular sarcomas are extremely rare with most masses of the scrotal sac localising to the testis and being neoplastic in nature. The paratesticular region comprises the spermatic cord, testicular tunics, epididymis, and vestigial remnants such as the appendices epididymis and testis. Neoplasms arising from this region form a heterogeneous group with distinct behavioural patterns. Here we present a patient, 84-year-old male, who presented with a tender swelling of his left scrotum and pubic region. There were associated lower urinary tract symptoms. His past history included prostate adenocarcinoma diagnosed 7 years prior to presentation, for which he had undergone ADT and radiation therapy. Physical examination revealed tender swelling of left hemiscrotum with edema over pubic region. USG Scrotum which showed a well organised heteroechoic collection with septations noted in the left scrotal sac ? abscess. He was taken for left orchiectomy, intra-op a fungating mass was seen in left hemiscrotum which was highly friable and vascular, biopsy was done with bilateral orchidectomy. HPE was suggestive of Pleomorphic leiomyosarcoma. He underwent Palliative Radiation with 2000 cGy in 5 fractions. Patient subsequently developed multiple lung metastasis, in view of poor prognosis patient was given palliative care. Leiomyosarcoma should be considered as a differential diagnosis in any elderly male presenting with an intrascrotal mass. Although primary management has previously been based on radical orchidectomy with high ligation of the spermatic cord, locoregional recurrence rates are as high as 50%

MP 07 – 04**Primary primitive neuroectodermal tumor of urinary bladder: a rare tumor and its management****Rao Niren, Desai Pragnesh, Singh Prabhjot, Seth Amlash**

All India Institute of Medical Sciences, New Delhi

Introduction: Primary primitive neuroendocrine tumors (PNETs) of urinary bladder are very rare and also known as peripheral neuroepitheliomas or peripheral neuroblastomas. They are closely related to extrasosseous Ewing's sarcoma and have common chromosomal abnormality t(11:22) (q12;q24). Initially described in 1918, till now 11 cases of PNETs have been reported in the English literature. To the best of our knowledge this is the 12th such case report to be described in literature. **Material and Methods:** A 27 year old man presented with a history of gross painless hematuria for 3 years. CT scan revealed 33 x 17 mm mass in urinary bladder along the right posterolateral wall. Results : Patient underwent transurethral resection of bladder tumor in other hospital and histopathology revealed primitive neuroectodermal tumor of urinary bladder. Patient was then referred to our institute and slides review were suggestive of the same finding. A repeat CT scan revealed mild thickening in the urinary bladder along the right posterolateral wall. He underwent cystoscopy and biopsy from the residual bladder wall thickening which did not reveal any malignancy. Additionally a PET CT was done which did not reveal any FDG avid lesion. The patient has been on regular check cystoscopy and recurrence free since last two and a half years. **Conclusion:** PNET of bladder is an extremely rare and aggressive tumor, however timely intervention may in rare cases obviate the need of radical surgery or chemotherapy.

MP 07 – 05**Renal cell carcinoma with inferior vena cava thrombus-our experience of 7 recent cases****Shailendra Shukla, Vikas Kumar, Ashish Nair, Sam Thampan, Vasudevan S**

Government Medical College, Trivandrum

Introduction: - Venous system invasion with RCC is found to occur in 4-10% cases. Although complete removal of tumour thrombus in the IVC does not affect patient prognosis, non removal has been associated with poor survival rates. **Material and Methods:** - We reviewed Medical records of RCC patients who had IVC extension that were operated between Jan 2011 to august 2014 at G.M.C Trivandrum. **Results:** - Total 7 Patients with tumour extension into IVC were operated. The limit of Tumor extension was level I & II (4 pt), Level III (2pt) and level IV (1pt). Right liver mobilization with hepatic vascular extension was performed in 2 patients, Cardio-Pulmonary bypass was required in one patient. Mean cross clamping time was 12 min. There was no operative mortality or hepatic insufficiency. Patient with level III & IV Thrombus required large amount of mean blood transfusion compared to level I & II (9.3 vs. 3.5 pack). Operative time was longer patient with level III & IV than level I & II (620 vs. 350 mins). Post operative ICU stay was longer in level III and IV tumour thrombus (5 vs 2 days). Mean follow up time was 22 months (range 2-40 months) **Conclusion:** - All patients with RCC with IVC tumor thrombus should be consider for radical nephrectomy with thrombectomy. These tumors can be totally resected by aggressive approach with an acceptable morbidity and mortality and satisfactory long term survival rate.

MP 07 – 06**In newly detected bladder cancer, lower urinary tract symptoms as sole presentation : incidence and clinical characteristics****Shambhulinga CK, Shanmughadas KV, Madhavan N, Rajeevan AT, Dineshan KM, Venugopal AV, Felix Cardoza**

Govt Medical College, Calicut

Introduction and Objective: LUTS as sole presenting symptoms in patients with newly diagnosed bladder cancer, as reported, incidence of which is very low. Objective of this study was to analyse clinical characteristics of newly diagnosed bladder cancer patients who presented solely with

LUTS. **Materials and methods:** We evaluated 175 patients who were newly diagnosed to have bladder cancer. These patients were grouped into two, one presenting solely with LUTS (LUTS group) and others who presented with symptoms other than or in addition to LUTS (nonLUTS group). Demographic, clinical and pathological variables were collected and all patients were followed up for about 1 year. **Results:** 8 patients (8/175) presented solely with LUTS. Mean age of presentation was 62.3 years. Of these 8 patients, 4 were diagnosed to have CIS, 3 had Ta and one had T2 disease. After a median follow up of 1 year, recurrence occurred in 4 patients (4/8) with progression in one patient (1/8). All patients were grouped into two, LUTS (8/175) and nonLUTS (167/175). Patient in LUTS group were more likely to present with CIS than nonLUTS. Conversely, patients in nonLUTS group were more likely to experience disease recurrence than LUTS group. **Conclusion:** Patients solely presenting with LUTS form small but sizeable number in newly diagnosed bladder cancer cases. This study suggests that urologists should have low threshold for evaluating patients with unexplained LUTS for underlying bladder cancer.

MP 07 – 07**Inflammatory pseudotumor of perirenal soft tissue****Shirish Mishra, Bhat P, Bhatt M, Shivalingaiah M, Ratkal CS**

Institute of NephroUrology Bangalore

Introduction- Inflammatory pseudotumor or inflammatory myofibroblastic tumor (IMT) of kidney or perirenal soft tissue is rare benign lesion of unknown etiology, seen mostly in children and young adults. Less than five cases have been reported in the perirenal tissue. **Materials and Methods-** A 29 year old male presented with right loin pain for 6 months which was dull, continuous and non-radiating. On evaluation usg abdomen revealed a 3x2 cm right suprarenal solid mass lesion with no evidence of renal involvement. MRI revealed a large lobular heterogenous lesion measuring 3x4 cms in the superolateral aspect of right kidney with an irregular interface probably an exophytic lesion which was hypointense on T1 and hyperintense on T2 suggestive of renal cell carcinoma. In view of negative metastatic work up, right partial nephrectomy was planned. **Results -** Intraoperatively, there was a well circumscribed lesion in right superolateral aspect of right kidney in perirenal tissue and showed no infiltration into the renal tissue. Enucleation of lesion was done. Microscopy showed bland appearing spindle cells in fibromyxoid stroma, lymphocytic infiltration, absence of mitotic figures. Immunohistochemistry showed desmin and vimentin positivity and negative for ALK, CD99, and CD 34; and diagnosed as inflammatory pseudotumour of perirenal soft tissue. **Conclusion-** This tumor has been misdiagnosed by pathologists as myxoid leiomyosarcomas, and sarcomatoid carcinomas. Immunohistochemistry is the key for the diagnosis so that postoperatively benign nature of the condition and good prognosis can be explained to the patient.

MP 07 – 08**Urinary bladder leiomyosarcoma in a patient with bilateral retinoblastoma post radiotherapy – a rare case report and review of literature****Siddalingeshwar C Doddamani, Fredrick Paul, Satish Kumar, Suresh Bhat**

Government Medical College, Kottayam

Introduction Occurrence of second malignancies in a patient who has received chemotherapy or radiotherapy for a primary tumor has been a topic of intense research in the recent past. Occurrence of such malignancies outside the site of radiotherapy is rare. Hereby we report a case of bilateral retinoblastoma treated with External beam radiotherapy to both eyes who after thirty years presented with leiomyosarcoma of the urinary bladder. Only 10 cases of such urinary bladder leiomyosarcoma in patients with previous retinoblastoma have been reported till date, 6 out of these patients were treated with chemotherapy, 2 with both chemotherapy and radiotherapy and only 2 of these 10 patients had received radiotherapy alone as treatment for retinoblastoma. Case report A 30 year old male patient presented to us with history of painless hematuria with clots of 2 months duration. At the age of 3 years he was diagnosed to have retinoblastoma in both eyes and was treated with 18 cycles of radiation. On evaluation with ultrasound and Contrast enhanced CT scan with

urogram a 6 x 6 cm large growth was noted arising from the right anterolateral wall of the urinary bladder. On cystoscopy large 8x6 cm solid lesion was noticed. We took a transurethral tumor biopsy since it was too large to resect. On histopathology a high grade sarcoma was reported. On further immunohistochemistry the tumor was positive for desmin and smooth muscle actin which confirmed our diagnosis as urinary bladder leiomyosarcoma. The patient was not willing for radical cystectomy and hence was referred to chemotherapy following which he lost followup. Discussion Leiomyosarcoma is a mesenchymal malignancy that accounts for 0.2–0.7% of all bladder cancers. This is just the third case to be reported where urinary bladder leiomyosarcoma developed as a second malignancy in a patient with bilateral retinoblastoma treated with radiotherapy. The association of leiomyosarcoma of urinary bladder with RB1 and P53 mutations and probable other genetic factors is still under study.

MP 07 – 09

Chromophobe renal cell carcinoma: comprehensive analysis of 11 cases

Siddayya C Hiremath,

KLE Kidney Foundation, Belgaum

Introduction: Chromophobe renal cell carcinoma (chRCC) is a subtype of renal cell carcinoma (RCC). ChRCC is diagnosed mainly in 6th decade of life. An incidence of chRCC is similar in both men and woman. Eighty six percent of chRCCs cases are diagnosed in early stages. To analyze the clinical behavior of chromophobe renal cell carcinoma (chRCC), we retrospectively evaluated the data from our hospital. The aim of this study was to evaluate the incidence, clinical presentation, prognosis, and clinical outcome of chRCC in a retrospective series of nephrectomy specimens. Materials and Methods: We retrospectively looked at our hospital database which included 318 patients who had undergone surgery for renal cell carcinoma between Jan 2000 and Dec 2013. Several parameters were noted in each patient which included age, sex, symptoms at presentation, ECOG performance status, tumor diameter, TNM stage and grade, histologic cell type, follow-up time, local recurrence, disease progression, and death. Results: Of 318 patients included in the database, 11 (3.45%) had chRCC. Preoperatively 9 (81%) had T1 lesions and the remaining 2 (18.9%) had T2 lesions. Of the T1 lesions, 6 had tumors 4cms (T1a) in diameter and the remaining 3 had tumors > 4 cms (T1b) in diameter. The mean follow-up of the patients is months. Conclusions: Our series confirms a favorable outcome for the chRCC subtype with little local aggressiveness and a low propensity for progression and death from cancer.

MP 07 – 10

Single Institute experience of Primitive Neuroectodermal Tumour of Kidney – case series of five patients

Sivasankaran N, Balagopal Nair, Georgie Mathew, Ginil Kumar P, Sanjeevan KV, Appu Thomas

Amrita Institute of Medical Sciences and Research, Kochi

OBJECTIVES: Primitive neuroectodermal tumor (PNET) of the kidney is a rare entity, the diagnosis usually being made at histopathology. The purpose of our study was to review our experience in diagnosis and the management of patients with renal PNET. METHODS: Retrospective analysis of 5 patients of renal PNET treated from 2010 to 2014 and our data compared with the literature. RESULTS: There were 2 male and 3 female patients with median age of 30 years. At presentation, 2 patients had localized disease and 3 patients had venous thrombosis. CD99, S-100 positivity on immunohistochemistry supported the diagnosis. Radical nephrectomy with or without IVC exploration was performed in all the cases. One patient died intraoperatively. Four patients received adjuvant chemotherapy. Median follow-up was 18 months (range 4 to 48) and all four has metastasis free survival till now. CONCLUSIONS: The diagnosis of renal PNET is rare and has to be considered as a differential diagnosis in young patients presenting with renal mass. Treatment consists of combination of surgical resection and postoperative chemotherapy.

MP 07 – 11

Correlation of Serum Calcium & Magnesium Ratio with S. Prostate Specific Antigen, Prostate Gland Weight &

Gleason Score In Carcinoma Prostate - A Prospective, Age Matched Control Study

Somor Jyoti Bora, Sarma D, Bagchi PK, Barua SK, TP Rajeev, Baruah SJ

Gauhati Medical College Hospital, Guwahati

Introduction & Objective: Prostate cancer is the most common non-cutaneous malignancy in Western societies and the second leading cause of cancer death in men. Off late, very few studies has shown a correlation between alteration in Ca²⁺/Mg²⁺ ratio and prostate carcinoma. However, whether such alteration is influenced by histological grade of carcinoma prostate or prostate size is yet not known. Aim and objectives of this study is to find out the extent of alteration in Ca²⁺/Mg²⁺ ratio in patients with carcinoma prostate and to correlate whether such alteration has got any bearing on prostate weight, S. PSA and Gleason score. Materials & Methods: The study was conducted in the Deptt. of Urology from January, 2013 to August, 2014. All patients, above 50 years, presenting for the first time in our department with suspicious prostatic lesion was taken up for the study. It was a prospective, age matched controlled study. Patients with suspicious prostatic lesion on DRE and/or S.PSA > 4ng/dl was subjected to TRUS guided biopsy (12 core) to ascertain the presence of carcinoma and the Gleason grade. Results & Observations: Altogether, 25 patients were included in the study, of which 17 patients were found to have raised Ca²⁺/Mg²⁺ ratio (p < 0.0001). In my study, Ca²⁺/Mg²⁺ ratio was found to be elevated in relation to Gleason score (R=0.37, p=0.03), and S.PSA (R=0.02) and Prostate gland weight (R=0.06). Conclusions: In my study, there was positive correlation between Ca²⁺/Mg²⁺ with aggressiveness of carcinoma prostate (Gleason score + S. PSA).

MP 07 – 12

Para testicular serous papillary cystadenocarcinoma, ovarian type - a rare case report

Tripathy N, Choubey S K, Rao A N, Adhyam M, Sreedhar D

St. John's Medical College, Bangalore

INTRODUCTION AND OBJECTIVE: Para-testicular serous papillary cystadenocarcinoma of the testis is a rare neoplasm. Even though serous and mucinous types are the most frequently observed neoplasms, these are still rare. In fact, the literature reports only 40 cases of serous type and 15 cases of mucinous type. METHODS: A 62 year old man came to our outpatient department with complaints of swelling in the left hemiscrotum since two and a half months with mild discomfort. Physical examination revealed an enlarged left testis (8 * 5 * 4 cm) which is hard, lobulated and non-tender. An ultrasound scan of the left testis showed a complex cystic lesion in the left scrotal sac with adherent small left testis and non-visualised epididymis - ? Inflammatory collection / ? Paratesticular neoplastic lesion. Routine blood work up normal. Levels of the serum testicular tumour markers (AFP, Beta-HCG, and LDH) were normal. Chest x-ray normal. RESULTS: He underwent Left high inguinal orchiectomy. At surgery, there was a firm mass 5*3 cm, arising from posterolateral aspect of the testis. Cord structures normal. Histopathology revealed a serous papillary cystadenocarcinoma - ovarian type. He was started on chemotherapy. There is no recurrence found at six months follow up. CONCLUSION: Serous cystadenocarcinomas of male genital tract are very similar to their ovarian counterpart but their occurrence in the male genital tract is extremely rare. However it should be considered in the differential diagnosis of any malignant testicular tumour with epithelial elements.

MP 07 – 13

Partial cystectomy with augmentation cystoplasty in urachal adenocarcinoma

Valsangkar R S, Goyal N K, Bajaniya S P, Rizvi S J, Bhandari N S

Institute of Kidney Diseases and Research Centre and Institute of Transplantation Sciences, Ahmedabad

Introduction and objective: Partial cystectomy is the standard treatment for urachal adenocarcinoma. However patients may be left with small bladder postoperatively with consequent bothersome lower tract

symptoms(LUTS). We report simultaneous bladder augmentation after extended partial cystectomy for urachal adenocarcinoma with good oncological outcome with excellent voiding. Method: Sixty two year diabetic male patient presented with gross painless hematuria for 15 days. On evaluation patient was found to have bladder tumor at dome. After metastatic workup, patient underwent transurethral resection of bladder tumor that revealed adenocarcinoma with bladder capacity of 250 mL. Patient underwent cystoscopically guided laparoscopic partial cystectomy. After confirming negative margin with frozen section, patient underwent bladder augmentation using ileum with U configuration. Result: Patient had uneventful recovery postoperatively. Patient is voiding well every 2 hrly with no need of intermittent catheterization, is fully continent and minimally bothersome LUTS. His postoperative bladder capacity is 250 mL. After 4 months of follow up, there is no tumor recurrence. Conclusion: Augmentation cystoplasty, though frequently done post partial cystectomy for benign conditions, is not reported along with partial cystectomy for bladder malignancy to our knowledge. We report cystoscopically guided laparoscopic partial cystectomy with simultaneous bladder augmentation with good oncological outcome with excellent continence and voiding.

MP 07 – 14

To evaluate the efficacy of solifenacin in the management of irritative symptoms after transurethral resection of bladder tumors (TURBTs) with subsequent intravesical chemotherapy

Vasanth Rao Periketi, Satish Babu, Syama Sundara, Bhavani Shankar, Raghuv eer, Anil Kumar, Tyagi A

SVIMS Tirupati

AIMS AND OBJECTIVES To evaluate the efficacy of solifenacin in the management of irritative symptoms after transurethral resection of bladder tumors (TURBTs) with subsequent intravesical chemotherapy. **MATERIAL AND METHODS** A total of 40 patients undergoing TURBT were randomly allocated into 2 groups, 20 patients in each group. Group 1 patients received solifenacin 5 mg, 6 hours before surgery and 5 mg per day, after surgery for 2 weeks, whereas group 2 patients received a placebo. Patients with low-risk non-muscle-invasive bladder cancer received immediate postoperative instillation of mitomycin. All patients completed bladder diaries before surgery, on the 1st, 7th, and 14th days after removal of the catheter with overactive bladder symptom scores completed preoperatively, and on the 7th and 14th days. Additionally, the incidence and severity of catheter-related bladder discomfort were recorded at 6, 12, 24, 48, and 72 hours after the surgery. **RESULTS** The incidence and the severity of catheter-related bladder discomfort in group 1, compared with group 2, were significantly reduced ($P < .05$). There was a significant difference in overactive bladder symptom scores between the 2 groups. Episodes of daytime, frequency, nocturia, urgency, and urge urinary incontinence in group 1 were also significantly lower than in group 2 ($P < .05$). **CONCLUSION** This study demonstrates that solifenacin can be beneficial for the management of irritative symptoms after TURBT with subsequent intravesical chemotherapy

MP 07 – 15

An observational study to correlate the outcomes of patients with renal stones treated with ESWL with respect to stone's Hounsfield density, Skin-to-Stone distance and stone composition in a tertiary hospital in eastern India

Anurag Puri, B Ghosh, Malay Kr Bera, Dilip Kr Pal

IPGME&R, Kolkata

AIMS AND OBJECTIVE 1. To determine the stone clearance rate with respect to NCCT – HU density of the stone. 2. To determine the stone clearance rate with respect to Skin-to-Stone distance. 3. To determine the stone clearance rate with respect to stone composition. **METHOD** This was a prospective observational study from february 2013 to August 2014 where each patient underwent a pretreatment NCCT KUB to assess its Houns-field density and skin to stone distance. Post clearance stone analysis was also

done to know the stone composition. Stone clearance were anthologized for the patients enrolled in the study and stone clearance with respect to HU density, SSD and stone composition. Data was meticulously collected & analysed with appropriate statistical measures. **RESULTS:** 143 patients were enrolled in this study who underwent single session of ESWL. 119 patients had successful outcome and in 97 patients, stone could be retrieved. Patients with HU density less than 800 had successful outcome and those above this had failure. The patients with skin-to-stone distance less 95mm had successful outcome and those more than this had unfavourable outcomes. Majority of the stones analysed were of calcium oxalate composition with other ones being triple phosphate, uric acid stones. **CONCLUSION** The outcomes of the ESWL therapy have direct correlation with the stone's HU density, skin to stone distance & stone composition and therefore help in predicting the success with ESWL therapy

MP 08 – 01

The efficacy of radiographic measurements in predicting success after extracorporeal shockwave lithotripsy for lower calyceal renal stones

Arivazhagan K, Karunamoorthy, G Chengalvarayan, C Ilamparuthi, V Selvaraj, K Thiyagarajan

Madras Medical College, Chennai

Objectives: To assess the impact of lower pole calyceal anatomy on clearance of lower pole stones after extracorporeal shockwave lithotripsy (ESWL) by means of a new and previously defined radiographic measurement methods. **Materials and Methods:** 128 patients with solitary radiopaque lower pole kidney stones were enrolled in the study over a period of one year (May 2013-April 2014). Infundibulopelvic angle (IPA), infundibulotransverse angle (ITA), infundibular length(IL), and infundibular width (IW) were measured on the intravenous urographies which were taken before the procedure. **Results:** 96 of 128 patients (75%) were stone-free after a follow-up period of 3 months. The IPA, ITA, IL and IW were determined as statistically significant factors, while age, gender and stone area were found to have no impact on clearance. **Conclusion:** By the radiographic measurement methods related to lower pole kidney anatomy, appropriate patient selection and increment in success after ESWL may be achieved.

MP 08 – 02

The efficacy of extracorporeal shock wave lithotripsy for isolated lower pole calculi compared with isolated middle and upper caliceal calculi

Bhatt Manish, Shivkumar, Srinivas J, ChandrasekherCR

Institute of Nephrourology Bangalore

Purpose: To assess the efficacy of ESWL monotherapy for isolated lower pole nephrolithiasis, and compare it to that for isolated middle and upper caliceal calculi. **Materials and Methods:** ESWL done on 270 patients with isolated caliceal stones using a Dornier medtech delta II lithotripter. The stones were localized in the lower, mid and upper calices. Stone load was recorded in cm². Patients were stratified into 3 groups based on stone burden. The energy and shock waves,, number of treatment sessions, auxiliary measures and complications were noted. Patients were evaluated with IVP or plain film of KUB, and ultrasonography when stone-free, or clinically significant residual fragment status, including nonobstructive and noninfectious insignificant fragments 4 mm. or less, was noted at the fluoroscopic control 2 to 4 weeks after the last session. **Results:** Auxiliary procedures were used in 10 % units before treatment. There was a highly significant correlation between stone-free and retreatment rates, and stone burden. The overall stone-free rate was 66%, and 63%, 73% and 71% for lower, middle and upper caliceal stones, respectively (p 0.1). For the group with stones greater than 2 cm² overall stone-free rate decreased to 49%, and 53%, 60% and 23% in lower, middle and upper caliceal locations, respectively. Steinstrasse developed in 39 (6.5%) patients. **Conclusions:** Extracorporeal shock wave lithotripsy appears to be successful for management of isolated caliceal stone disease. Treatment efficacy was not significantly different among stones localized in lower, middle and upper poles.

MP 08 – 03**The efficacy of hounsfield unit density of renal calculi in predicting the success of ESWL****Gayen D, Das A K, Mondal T K, Majhi T K, Sarkar D, Shakur A**

Nil Ratan Sirkar Medical College, Department of urology, Kolkata

Introduction and objective:-To determine the utility of the urinary stone attenuation from value (HU) from non-contrast CT for predicting the success of extracorporeal shock wave lithotripsy. Patients & Method: - The study included 50 patients with single renal calculus of <2cm. The Hounsfield unit measured using NCCT. Patients age, sex, stone laterality, stone size, Hounsfield unit, stone location, presence of DJ stent, PCS dilatation and adequate analgesia were studied as potential predictor. The outcome was evaluated after 4 weeks of ESWL session by digital X-ray or NCCT. ESWL success was defined as patient being stone free or with remaining stone less than or equal to 3 mm which were considered as clinically insignificant residual fragment. Results: - patients were grouped according to the Hounsfield unit as group-1 (< or = 500), group-2 (501-1000) and group-3 (>1000). After first sitting success rate was 100% in group-1, 75% in group -2 and 45% in group-3. Success rate farther decreases in lower calyceal stone. Conclusion:-The use of NCCT to determine the attenuation values of urinary calculi before ESWL helps to predict treatment outcome and consequently could be helpful in planning alternative treatment for patients with a likelihood of a poor outcome from ESWL.

MP 08 – 04**The role of radiographic anatomical measurement methods in predicting success after extracorporeal shockwave lithotripsy for lower pole calyceal stones****Gordhan Ram Choudhary, Manikandan K, Shanmughadas K V, Madhavan N, Rajeevan A T, Dineshan K M, Venugopal A V, Felix Cardoza**

Govt Medical College, Calicut

Objectives: To assess the impact of lower pole calyceal anatomy on clearance of lower pole stones after extracorporeal shockwave lithotripsy (ESWL) by means of a new and previously defined radiographic measurement method. Materials and Methods: Eighty patients with solitary radiopaque lower pole kidney stones were enrolled in the study. Infundibulopelvic angle (IPA), infundibulotransverse angle (ITA), infundibular length(IL), and infundibular width (IW) were measured on the intravenous urographies which were taken before the procedure. Results : The IPA,ITA,IL and IW were determined as statistically significant factors, while age, gender and stone area were found to have no impact on clearance. Conclusion: By the help of radiographic measurement methods related to lower pole kidney anatomy, appropriate patient selection and increment in success after ESWL may be achieved.

MP 08 – 05**The modern era struvite stone: patterns of urinary infection and colonization****Haresh G Thummar, Usama K, Adam De Fazio, Michael Rothberg, Mantu Gupta**

MT Sinai Hospital, St Luke Roosevelt Hospital, New York, Columbia UNI,USA

INTRODUCTION AND OBJECTIVES We sought to offer a modern assessment of struvite stone formation by examining both the characteristics of struvite formers and the nature of associated infectious organisms. METHODS We retrospectively identified patients who underwent PCNL between February 2009 and August 2013. Predisposing characteristics and clinical history of UTI were assessed. Urine cultures (pre-operative free catch and intra-operative renal pelvic) and stone cultures were reviewed for evidence of infection. RESULTS Struvite formers represented 38 (8%) of 474 patients. 83% of struvite formers were female (vs 46% in non-struvite formers, P<0.001). 94% of struvite formers had a history of recurrent/recent UTI and 60% exhibited a UTI risk factor. A greater percentage of struvite formers demonstrated growth on pre-operative urine (45% vs 22%, P=0.003) and stone cultures (69% vs 23%, P<0.001) compared to non-

struvite formers. Stone cultures were positive for urea-splitting organisms in 29% of struvite formers (vs. 10% non-struvite formers, P=0.001). 31% of struvite stones were sterile and 49% grew non-urea-splitting organisms, including E. coli and Enterococcus spp. CONCLUSIONS While demographic data, clinical history and culture results suggest a significant predisposition to infection among struvite formers, urea-splitting organisms could not be identified in association with all struvite stones in this series. The additional finding of sterile struvite stones prompts consideration of antibiotic mediated sterilization and lends support to pre-operative antibiotic use. The presence of traditionally non-urea-splitting organisms encourages re-evaluation of their urea-splitting potential and reveals the importance of expanded antibiotic coverage for both Enterococcus spp. and E. coli in managing suspected struvite stones

MP 08 – 06**Left out piece of foley bulb-mimicking stone - A case report****Jayadeva Sinha**

Saraswati Nursing Home & Stone Clinic,Gaya

Initially it looked like a bladder stone in a female. An attempt was made to fragment it perurethrally, but it was not possible. Hence the specimen was removed by suprapubic cystotomy. On dissection, it was discovered to be a case of a piece of foley bulb with calcification looking like a stone. X-ray kub was also giving unusual appearance. Conclusion-this condition has to be kept in mind while evaluating an xray kub presenting with unusual radiopaque shadow

MP 08 – 07**Bilateral single session ureteroscopic lithotripsy: have we overcome the controversies ?****Mukherjee Subhabrata, Sharma PK, Mandal SN, Karmakar D**

Calcutta National Medical College and Hospital, Kolkata

INTRODUCTION & OBJECTIVE: Till date, there is no clear cut recommendation regarding bilateral single session ureteroscopic lithotripsy (URSL) for bilateral ureteric stones. The purpose of this study was to evaluate efficacy and safety of the above procedure. METHODOLOGY: We have performed 37 (74 renal units) bilateral single sessions URSL in our hospital from August 2011 to July 2014. A 7/8.5 Fr semi-rigid ureterorenoscope (URS) was used for the procedures and pneumatic lithotripter was used for stone fragmentation. DJ stenting was done in selected cases. Patients were advised to attend our outdoor after 2 weeks with X-ray KUB. Patients were followed for a period of 3-12 months. RESULTS: The A high stone-free rate was achieved (89%) after single session bilateral URSL with a retreatment rate of 8.4%. Proximal ureteral calculi, large stones (>10 mm) and impacted stones carry the greatest risk of unsuccessful results. Failed procedures were managed with repeat URSL, DJ stenting and ESWL. Intraoperatively false passage or minor ureteric perforations were seen in 5 patients. Postoperative complications included hematuria in 6 patients, abdominal pain in 5 patients, and persistent fever in 3 patients. No long-term complications were observed. CONCLUSION: Bilateral single session URSL is safe and effective procedure for the management of bilateral ureteral stones. The method does not yield major complications and saves patients from a second procedure and prolong hospital stay.

MP 08 – 08**Screening of Primary Hyperparathyroidism in all patients with Urolithiasis: Is it the time to step-up our initial investigation protocol?****Pramod K, Krishna Prasad T, Maneesh Sinha, Venkatesh Krishnamoorthy**

NU Hospitals, Bangalore

Urolithiasis (UL) occurs in 15-20% of patients with Primary Hyperparathyroidism (P-HPT); conversely, about 5% of patients with UL have HPT. We have done a retrospective review of 7450 patients with UL who had presented to us between 2005 and 2014. At our institution, all

patients with UL undergo serum levels of corrected calcium, phosphorus and uric acid. More comprehensive evaluation is reserved for high risk patients. Of the 7450 patients, 33 (0.44%) were diagnosed as having P-HPT, when compared to 5% in other studies. 29 patients had multiple, bilateral or recurrent stone disease. The remaining 4 patients (13.7%) had presented with solitary calculus and had been diagnosed after their first stone episode. All 33 patients underwent parathyroidectomy (total/subtotal/unilateral). Of these, 25 were parathyroid adenomas, 1 was parathyroid carcinoma, 4 were parathyroid hyperplasia and 2 revealed normal parathyroid on histopathological examination. High risk UL patients such as those with recurrent stones, family history and large stone burden should undergo a thorough metabolic evaluation. Abbreviated evaluation of single stone formers in standard literature includes estimation of serum parathyroid hormone, but there is still a reluctance to include it in the initial investigation protocol of UL. Is it the time to include parathyroid hormone estimation in our initial investigation protocol of UL, rather than reserving it for only high risk patients?

MP 08 – 09

Study of various factors influencing outcome of extracorporeal shock wave lithotripsy in stones less than 2 cm

Rajeev Ayyappan R, Prabakaran P, Leela Krishna P, Pitchai Balashanmugam K, Muthulatha N, Thiyagarajan K

Govt Kilpauk Medical College and Hospital

Introduction and objective : ESWL is a safe, effective method to treat urinary lithiasis. ESWL is usually an outpatient procedure. The success rate in ESWL depends on stone location, size, number, and fragility as well as calyceal anatomy and patency of the urinary tract. The aim is to study the influence of various factors on the outcome of ESWL in stones less than 2cm. **Materials and methods :** This is a Prospective study of 100 Patients with upper tract stones treated with ESWL during August 2012 to March 2014. **Results :** Size, density and location of stone and BMI of patient had significant correlation with outcome after ESWL. Age and sex of patient did not have correlation with outcome after ESWL. **Conclusion :** ESWL is a useful, non invasive modality of treating certain types of upper urinary tract calculi. The overall success rate of ESWL in this study was 62 % in treating upper urinary tract calculi. The prognostication of the success of ESWL is possible by identifying certain factors which enable us to easily select the patient group for whom this treatment can be given.

MP 08 – 10

Acute ureteric colic causing Mallory Weiss tear

Rajesh Kumar Reddy Adapala, Padmanabh Venugopal, GG Laxman Prabhu, Ranjit Shetty

Kasturba Medical College, Mangalore

INTRODUCTION & OBJECTIVE: Acute renal or ureteric colic is usually associated with nausea and vomiting. Nausea is caused by the common innervation pathway of the renal pelvis, stomach, and intestines through the celiac axis and vagal nerve afferents. We are presenting a rare case of acute ureteric colic due to left distal ureteric calculus causing severe nausea, multiple episodes of vomiting and haematemesis. **MATERIALS AND METHODS:** 38 year old male presented with history of severe left loin pain colicky, intermittent, radiating to groin with severe nausea, vomiting since 1week. He also developed two episodes of frank hematemesis. Patient was not alcoholic and no history of analgesic abuse. Ultrasound abdomen suggestive of left lower ureteric calculus (7mm) causing proximal hydronephrosis. Gastro-duodenoscopy showed mucosal tear at gastro-esophageal junction which was managed conservatively since there was no active bleeding was detected. Left uretero renoscopy was done lower ureteric calculus was fragmented with holmium laser and No. 5Fr. DJ Stent was deployed. **RESULTS:** Post-operative status was uneventful. **CONCLUSION :** Acute renal or ureteric colic is usually associated with nausea and vomiting and can rarely causes Mallory Weiss tear. **Key words:** Ureteric colic, Mallory Weiss tear, Uretero-renoscopy, Gastro-duodenoscopy.

MP 08 – 11

Unfused crossed renal ectopia with renal stone – a rare form of congenital renal anomaly with complication

Singh Hanuwant, Das AK, Mondal TK, Sarkar D

NRS Medical College and Hospital, Kolkata

Introduction: Crossed renal ectopia is a congenital anomaly. Typically one kidney is located in the proximity of the other kidney, and the ureter of the anatomically anomalous kidney crosses the midline to insert to the bladder in its normal anatomic position. Most of the cases are asymptomatic and are noted incidentally during autopsy, screening tests, or during investigation for unrelated causes. The majority, 90% of these are fused. Unfused crossed renal ectopia observed 1 in 75,000 autopsies is a rare congenital anomaly. The anomaly occurs more commonly in males with a ratio of 2 : 1, and left-to-right ectopia is seen three times more frequently than right-to-left ectopia. Treatment is only indicated for the complications of the anomaly rather than for the anomaly itself. **Case Presentation:** We report an unusual presentation of a case of unfused crossed renal ectopia with renal pelvic stone. Our patient was a 32-year-old male, previously asymptomatic, who presented with acute onset of left flank pain. Computed tomography with urography revealed unfused left to right crossed renal ectopia. The uncrossed kidney situated in its normal dorsolumbar location with proper orientation. The ectopic kidney was inferior with anteriorly oriented pelvis, aberrant vessels, retrorenal colon and a large pelvic stone. The case was managed by laparoscopic pyelolithotomy with DJ stenting. **Conclusion.** As crossed renal ectopia is associated with abnormally oriented calyces, aberrant vessels and retrorenal colon so per cutaneous nephrolithotomy may not be a safe option and laparoscopic pyelolithotomy is the minimally invasive modality of treatment.

MP 08 – 12

Complications of percutaneous nephrolithotomy:a single centre study

Sujith K, Fredrick P, Sathish K, Suresh B

Govt Medical College, Kottayam

Aim and Objective: PCNL, even though a well accepted procedure, is not without complications. It is highly effective but carries a greater risk of significant morbidity than less invasive treatment options such as ureteroscopy or extracorporeal shock wave lithotripsy. The objective of our study was to evaluate the incidence of complications of percutaneous nephrolithotomy (PCNL), factors effecting it and their management. **Patients and Methods:** We collected prospective data for consecutive patients who were treated with PCNL at our institution for 1 year. The demographic data, stone parameters, PCNL complications using modified Clavien classification, factors associated and stone-free rate were evaluated. The data collected from the patients was analyzed with SPSS software using Chi-Square test. **Results:** Of 108 patients, 58 patients had pelvic calculi. 47(50.7%) patients experienced one or more complications. The most frequent complications were fever and bleeding. The majority of complications (n = 34, 36.7%) were classified as Clavien grade I, according to the modified Clavien classification, grade II, IIIb and IVa complications were observed in 10 (10.8%), 1 (1.08%) and 1 (1.08%) patients, respectively. There was no mortality in our study. There was significant association between the occurrence of complications and patient comorbidities(p=0.00004) and also with respect to the stone position(p=0.039). **Conclusion:** The majority of complications after PCNL are minor. The risks of developing clinically significant complications, such as bowel injury, sepsis, and death, remain low. Majority of the complications can be managed conservatively

MP 08 – 13

Management of Urolithiasis in Anomalous Kidneys

Syed Javid Qadri, Jyoti Bansal, Nikhil Kale, Bipin C Pal, Jamal Rizwi, Pranjal Modi, N S Bhandari

Institute of Kidney Diseases & Research Centre, Ahmedabad

Introduction:- Urolithiasis has affected the human race for centuries. The problem of stone disease and its management becomes more complex in

patients harbouring anatomically abnormal kidneys. In these kidneys not only the incidence of stone disease increases but also management options can be technically demanding. A prospective clinical study was conducted for the management of urolithiasis in anomalous kidney at our hospital. **Material and Methods:-** Sixty patients of urolithiasis in anomalous kidneys were divided into two groups. Group I (SWL group), those with stones less than 2cm in size and Group II (PCNL group), those with stones equal to or more than 2cm in size. In each group univariate analysis of the data was done to analyse the impact of type of congenital renal anomaly, stone burden and the treatment modality offered for the stone free rate and to judge the overall outcome of each modality of treatment. **Results & Conclusion:-** Our study of urolithiasis in anomalous kidneys demonstrated that shock wave lithotripsy (SWL) is a safe, effective and reliable treatment modality in patients with stone size <2cm. Stone size and the degree of hydronephrosis are the significant factors which influence stone free rates. Percutaneous nephrolithotomy (PCNL) also is an effective and safe procedure for management of patients with large stone burden (≥ 2 cm) in anomalous kidneys. Presence of staghorn calculus, multicalyceal location of calculi and non-hydronephrotic pelvicalyceal morphology are the factors which affect stone free rates significantly.

MP 08 – 14

Staghorn calculus in autotransplanted kidney with neglected dj stent – an unusual case report

Varshney Anil, Rustagi Yashdeep

Max Hospital Pitampura , New Delhi

INTRODUCTION : Staghorn calculi are usually associated with infectious etiology. Chronic infection in patients with neglected foreign bodies forms a nidus for these calculi. These calculi are common in urological practice but their occurrence in an autotransplanted kidney is very rare. We present an unusual case of staghorn calculus over a neglected DJ stent in an autotransplanted kidney. **CASE REPORT:** A fifty five year old lady presented with pain in right lower abdomen and history of recurrent urinary tract infections for five months. She underwent autotransplantation of her left kidney to right iliac fossa after a failed ureterolysis for retroperitoneal fibrosis three years back. On evaluation she had a staghorn calculus on a broken DJ stent. A percutaneous nephrolithotomy was performed in supine position by a lower pole posterior calyceal puncture and calculus was removed successfully. **CONCLUSION:** Urolithiasis has been uncommonly reported in allogenic transplanted kidneys and occurs due to metabolic derangements, ureteral anastomotic strictures and chronic infection. Their occurrence in autotransplant kidney is even rarer.

MP 08 – 15

A rare case of laurence moon beidel syndrome presnting with renal agenesis and stricture urethra, fourniers gangrene

S Suresh Bhalaji

Bardet-Biedl syndrome (BBS) is an autosomal recessive condition characterised by rod-cone dystrophy, postaxial polydactyly, central obesity, mental retardation, hypogonadism, and renal dysfunction. BBS expression varies both within and between families and diagnosis is often difficult. We sought to define the condition in 28 yr old male patient presented with lt renal agenesis. Patient had diabetes mellitus and fourniers gangrene and open supra pubic cystostomy done with treatment for fourniers gangrene. Patient found to have stricture urethra for which optical internal urethrotomy done. Patient was operated in childhood for Hirschsprungs disease. The average age at diagnosis of this syndrome was 9 years, which is late for such a debilitating condition, but the slow development of the clinical features of BBS probably accounts for this. Postaxial polydactyly had been present in this patients at birth, but obesity had only begun to develop at around 2-3 years, and retinal degeneration had not become apparent until 8 years. Our study identified some novel clinical features, including neurological, speech, and language deficits, behavioural traits, facial dysmorphism, and dental anomalies in this patient. We present evidence for an overlapping phenotype with the Laurence-Moon syndrome and propose a descriptive label be adopted (polydactyly-obesity-Renal agenesis- stricture-diabetes mellitus eye syndrome).

UNMODERATED POSTER SESSIONS

UMP 01 – 01

Unusual presentation of Renal Squamous Cell Carcinoma

Kumar S, Rao N,Patel B,Bapat S S

Ratna Hospital, Pune

INTRODUCTION: Primary malignant renal tumours of the renal pelvis are relatively rare with squamous cell carcinoma (SCC) accounting for 0.7-7%. We report a case of primary SCC presenting as renal abscess. The tumour was diagnosed only after resection of the tumour. **METHODS:** A 57 year old male presented to us with right flank pain and fever with chills on and off for last 2-3 months. He was unsuccessfully treated once with IV antibiotics and DJ stenting later. With CT features of multiple cystic area and DTPA scan supporting poorly functioning kidney, nephrectomy was performed. His histopathological report showed SCC. **RESULT:** The association of renal SCC with renal abscess is very rare. The presence of malignant neoplasm in this case was unsuspected until the time of nephrectomy and initial treatment was concerned mostly with the resolution of renal abscess. **CONCLUSION:** Primary SCC is an aggressive tumour with poor prognosis. SCC of renal pelvis may present as renal and perinephric abscess and a careful search for any abnormal area in the wall should be attempted.

UMP 01 – 02

Transient bladder dysfunction after pelvic fracture associated urethral distraction defect (PFUDD) repair – a rare entity

S Brahadeeswaran, Deepak David, Vasudevan, Prasant Nayak, Joseph Philipraj, Mossadeq A

Mahatma Gandhi Medical College, Pondicherry

INTRODUCTION : Reconstruction of a PFUDD is associated with many complications such as recurrent urethral stricture, urinary incontinence, erectile dysfunction. In this article, we report a rare complication of transient bladder dysfunction after PFUDD repair. We could not find any report of its kind in the literature. **MATERIALS AND METHODS :** A 33- year- old man presented with history of having been run over by a tractor. He had an unstable pelvic fracture that was fixed externally. He presented with bleeding per urethra and with an inability to void. Retrograde Urethrogram was suggestive of a type 3 PFUDD. He underwent a staged repair with immediate suprapubic cystostomy followed by End to End Anastomotic Urethroplasty (EEAU) 3 months later. Catheter free trial was given and failed twice post operatively. Cystoscopy revealed a good urethral calibre at the anastomotic site. Urodynamic study was done and it revealed a hypocontractile bladder. Patient was able to pass urine with Crede's maneuver. He recovered after one year. He was able to initiate and pass urine voluntarily. Repeat UDS was normal. **RESULTS:** We demonstrated a transient hypocontractility of bladder in our patient with a patent anastomosis following PFUDD repair. **CONCLUSION :** Though rare, we want to stress that this could be one of the reasons for failed catheter free trial after EEAU for PFUDD and should be kept in mind when encountered with a failure to void after EEAU.

UMP 01 – 03

Giant Solitary Vesical Calculus

Baid M, Bhat A L, Aeron R, Kumar V, Kumar R, Mittal R

SP Medical College, Bikaner

Introduction: Giant vesical stones are universally uncommon. Fewer than 10 cases are reported in English literature weighing more than 750gm. In India largest solitary vesical calculus reported till date is of 600gm. We are reporting this case of solitary vesical calculus weight 760gm. **Method:** A 35 year old male patient presented with the complaints of lower urinary tract symptoms since last 5 years. Patient underwent retention of urine 20 days before surgery and per-urethral catheterisation was done without any difficulty. His routine hemogram revealed anaemia. Plain radiograph of pelvis revealed a large irregular bladder calculus. Abdominal Ultrasonography and IVP showed large vesical calculus with moderate bilateral hydroureteronephrosis. Suprapubic cystolithotomy

was done which revealed brownish white huge calculus of size 12.5 cm x 9.5 cm x 6 cm partially adherent to the bladder mucosa and weighing 760gm. Conclusion: To the best of our knowledge, this patient represents the largest vesical calculus in India till date. The patient had nutritional anaemia along with reduced fluid intake and compounded by urinary tract infection, all these factors may be the cause for formation of such a giant calculus. Nutritional deficiency can lead to huge vesical calculus. Stress should be laid down on preventive measures.

UMP 01 – 04

Forgotten DJ stent: Case study of 30 cases

Halarnakar RG, Talwadker NB, Chari PD, Koshy J, Prabhudessai MR, Oza U

Goa Medical College

INTRODUCTION AND OBJECTIVE: Double J stents are commonly placed for a short term for temporary relief of upper urinary tract obstruction and following surgery. Complications due to long term placement of DJ stents include hydronephrosis, encrustation and blockage, stent migration, fracture of stents, spontaneous fragmentation and stent knotting. **MATERIALS AND METHODS:** Thirty patients with stent syndrome from April 2008 to April 2014 were studied for their etiology, clinical presentation and management. Duration of forgotten stent was 1- 4 years. **RESULTS:** Patients were evaluated with detailed clinical history and radiological study. 70%(21/30) patients were unaware of DJ stent in situ, among which 3 were stented during pyeloplasty and 6 during pyelolithotomy. Vesical calculi was found in 70% (21/30) and pelvic calculi in 40% (12/30) and ureteric stent encrustations in 100%. Intravenous urography was done in all to assess renal function. Cystoscopy with Ureterorenoscopy was done in all patients. 81% (17/21) underwent cystolithotripsy, 19% (4/21) cystolithotomy. Percutaneous nephrolithotripsy was done in 50% (6/12) and pyelolithotomy in 16.6% (2/12). Extra corporeal shockwave lithotripsy in 16.6%(2/12) and nephrectomy in 16.6%(2/12). 17/30 patients were stented at other centres. 6/30 patients had serious medical illness during the interim period. **CONCLUSION:** Inadequate communication between patient and treating surgeon, migration of patients and major unrelated medical illnesses results in forgotten stents. It is recommended that computer records should be maintained of patients with stents placed in Urology clinics & reminders should be fed in the computer, for the urologist, about the time of stent removal. Forgotten DJ stent can lead to loss of renal units.

UMP 01 – 05

Short term outcomes of children with des presenting with urinary incontinence

Abhijith SM

KLEs Kidney Foundation, JNMCC

Introduction: Dysfunctional elimination syndrome (DES) is used to reflect the broad spectrum of functional disturbances that may affect the urinary tract, including that of functional bowel disturbances. Several authors have reported a high incidence of enuresis in children with urinary infection and constipation. We report short term outcomes of children with DES presenting with urinary incontinence. **Materials and Methods:** Children presenting with history of urinary incontinence and diagnosed to have DES formed the study group. All children were examined in detail, treated for UTI, treated for constipation and underwent ultrasonography evaluation. Children with persistent symptoms, recurrent UTI were further assessed with urodynamic studies. MCU was done in all children with recurrent UTI. Children were treated for voiding dysfunction with bladder relaxants, bowel softeners and whenever necessary antibiotics. Children with persistent UTI and/or VUR were treated for the same. **Results:** During the period Jan 2009 to Dec 2013, 27 children (19 girls and 8 males) presented with urinary incontinence associated with DES. Cystometry in all revealed unsustained bladder contractions, frequent voiding with high pressures. MCU done in 23 children showed reflux in 21 of the children. With conservative treatment symptoms improved in 19 children. Eight children had persistent infections and other voiding symptoms. 6 children needed Deflux treatment to correct VUR and two children needed Botox injections to reduce urge/urge incontinence. During a follow-up of 12 – 60 months, 23

children improved significantly. **Conclusions:** There exists strong evidence that there is an important relationship among constipation, detrusor instability, reflux, UTI, and enuresis. Proper attention to bowel and bladder management brings about satisfactory outcome at short term follow-up.

UMP 01 – 06

Role of immunohistochemistry in diagnostic armamentarium of biopsy negative carcinoma prostate

Areef Tamboli, Devendra Choudhari, Umesh Oza, SW Thatte, JN Kulkarni

Bombay Hospital Mumbai

75 year old male presented with obstructive and irritative lower urinary symptoms increasing in severity, severe backpain since 3 months. on investigation diagnosed to have raised serum PSA(250 ng). USG was suggestive of prostatomegaly (70 cc) with fairly normal echotexture. TRUS suggestive of nonspecific prostatitis. Bone scan was suggestive of lumbar vertebral metastases. TRUS was repeated again however was again nonspecific. Patient underwent biopsy of pararectal mass (incidental on CT) which on IHC turned out to be ADENOCARCINOMA prostate with neurovascular differentiation. Patient underwent orchidectomy, serum PSA showing decreasing trends. Immunohistochemistry though not done routinely can turn out to be extremely useful when other findings are equivocal.

UMP 01 – 07

Isolated Urinary Bladder Endometriosis

Atanu Jana, Animesh Kumar Das, Tapan Kumar Mondal, Debansu Sarkar, Krishnendu Maity

Nilratan Sircar Medical College, Kolkata

Introduction: Endometriosis is defined as presence of functional endometrial tissue in an ectopic site. It may affect 10% to 20% of women of child bearing age; with peak incidence in the mid-20s. Genitourinary endometriosis is a rare condition. There is very few reported case of Isolated Urinary bladder endometriosis without any prior intervention. **Case report:** Here we present a case of 28years female, mother of one child presented with haematuria at the time of menstruation for last 6months. There is no history of menstrual abnormality. Ultrasonography of kidney, ureter and urinary bladder shows mass lesion at right postero-lateral wall without any other abnormality. Cystoscopy and transurethral resection of urinary bladder tumour was done. Histo-pathological examination of resected specimen was found to be endometrial tissue infiltrating up to lamina propria. After resection patient is treated with hormonal therapy and now patient is symptoms free.

UMP 01 – 08

Prostatic urethral diverticula and its varied presentations

Baid M, Bhat AL, Arya MC, Upadhyay R, Kumar V, Kumar L

S P Medical College, Bikaner

INTRODUCTION: We present here three cases of prostatic urethral diverticula. **METHODS:** CASE 1 : Giant prostatic calculus with squamous cell carcinoma bladder A 50 yr old male presented with a large echogenic shadow(6X 5.3 cm) in vesical region on ultrasonography. CT abdomen suggested a large prostatic calculus. Patient underwent suprapubic cystolithotomy. After 4 months, he presented with painless, gross, total hematuria . Urine cytology showed malignant cells. Ultrasonography and CECT abdomen showed a large bladder mass extending extravasically. Biopsy showed Squamous cell carcinoma. CASE 2 : Balanitis xerotica obliterans with giant anterior and posterior urethral calculi A sixty year male presented with a 4x4cm hard mobile mass in the penoscrotal junction since 1 year. RGU/VCUG showed anterior urethral stricture with 2 large stones and huge prostatic cavity having an impacted calculus. Suprapubic cystostomy was performed and after 2 weeks anterior urethral calculi were removed by perineal approach. Subsequent urethroscopy revealed stone in prostatic urethral diverticula which was removed using lithotripsy. Perineal urethrostomy was created. CASE 3 : Prostatic diverticulum in 18 year old male A 18 year old boy presented with small phallus. On per rectal examination a soft mass was felt above prostate. On ultrasonography a mass

was seen posterior to bladder. On panendoscopy 8 -10 F urethra seen just distal to veru montanum there was a opening leading to a cavity posterior to bladder. A 5 F ureteric catheter was put in to cavity cystogram normal. CONCLUSION Presentation of urethral diverticulum varies from simple diverticulum to malignancy.

UMP 01 – 09

Retrograde pericatheter urethrogram (RPU) for the post-operative evaluation of the urethra: A single centre experience

Bansal Ankur, Sankhwar Satyanarayan, Goel Apul, Singh Vishwajeet, Singh Bhupendra Pal, Kumar Manoj, Singh Manmeet

KGMU, Lucknow

OBJECTIVE To describe our technique of RPU and its usefulness for the post-operative evaluation of the urethra **METHODS** Retrospective review of patients undergoing urethroplasty from Jan 2011 to Dec 2013. RPU done at 3 weeks postoperatively to access urethra. Patients with normal urethral outline, urethral catheter was removed and suprapubic catheter (SPC) was removed after 1-3 days. In cases showing contrast extravasation, catheter was kept for two more weeks. Data collected included: Data of urethroplasty including demographics, duration of symptoms, site, mean length of stricture, type of surgery, RPU finding, its complications and need of reintervention **RESULTS** Total number of urethroplasties done were 287 and RPU was done in 243. Mean duration of symptoms was 4.8 months, mean stricture length- 2.1 cm, site of stricture: Anterior urethra in 106(76.6%) and posterior urethra in 57 (23.4%). 110 (45.2%) underwent anastomotic urethroplasty and 133 (54.7%) underwent substitution urethroplasty. RPU showed urethral healing in 207 (85.2%), contrast extravasation in 36 (14.8%) and no contrast related complications reported. Reintervention was needed in 46 (15 showed urethral healing and 27 had contrast extravasation on RPU). **CONCLUSION** RPU is most useful radiologically diagnostic method to evaluate the timing of removal of urethral catheter and to obtain the objective parameter of urethral patency after urethroplasty. Prolonged catheter drainage in patients showing dye extravasation may be helpful. RPU may beforehand predict the success of urethroplasty and the need for reintervention.

UMP 01 – 10

A Prospective randomized study of large proximal ureteral stones: ureterolithotripsy versus laparoscopy

Bhupender Kadyan, VPSabale, SPKankalia, VSatav, DKJain, Mulay

Dr DY Patil Medical College, Pimpri, Pune

Objective To define the role of laparoscopic transperitoneal ureterolithotomy (Lap-TPUL) as a primary modality for large proximal ureteral stones (size > 15mm), we compared the outcomes of primary Lap-TPUL with those of ureterorenoscopy (URS), the currently established modality in this circumstance. **Materials & Methods** A total of 60 patients were included in the study. They were randomized into 2 equal groups. Group A underwent Lap-TPUL. Group B underwent URS, using semirigid URS with holmium laser/pneumatic lithotripsy. Various variables like stone clearance rate, operative time, hospital stay, ancillary procedures and complications were estimated for both techniques. **Results** The Lap-TPUL group and the URS group were comparable in age, gender distribution, body mass index, stone size and stone location. Lap-TPUL group required a longer operative time (124±25 versus 48±26 minutes; p<0.001) and hospital stay (4.2±2.1 versus 2.4±1.0 days;p<.001). However, stone clearance rate in a single session was higher in theLap- TPUL group (100% versus 88.5%). Total complication rate was not significant and was slightly higher in the URS group (10.5% versus 12.9%). **Conclusion** For large proximal ureteral stones (size>15mm), Lap-TPUL can be conducted safely as a first-line procedure without increase of complication rate, compared with conventional URS. Although TPUL required a long learning curve, prolonged operative time and a longer hospital stay with added advantage of high clearance rate in a single procedure.

UMP 01 – 11

An unusual cause of radiolucent filling defect in lower ureter

Bose Abhishek, SikkaShagun, Aulakh Baldev Singh, Sandhu JS
Dayanand Medical College and Hospital, Ludhiana

Introduction: Filling defect in the ureter are seen commonly due to radiolucent calculi, neoplasm, blood clot, infectious debris, sloughed papilla, fungal material. This was the first time we found the filling defect was due to inspissated pus in the lower ureter. **Case history:** A 62 year old diabetic female presented to us with right side percutaneous nephrostomy (PCN) in situ. One month earlier she was admitted with fever, altered sensorium and in septic shock. She was diagnosed to have B/L pyonephrosis. Patient was managed by Left sided DJ stenting. Right Sided DJ stenting was not possible so right sided PCN was done. Patient now presented to us for removal of PCN tube. Plain X ray KUB didn't show any radiopacity in the course of ureter on the right side. Nephrostomogram showed a filling defect in lower third of ureter. CECT KUB was done which suggested it be an inspissated pus in the lower ureter. Ureterscopy was done in this patient which showed a doughy substance in the lower end of ureter. The material was removed piece meal and DJ stent was inserted. **Discussion:** In our case the patient had pyonephrosis for which DJ stenting attempt failed on the right side for which a PCN was inserted. Workup revealed a radiolucent filling defect in lower ureter on nephrostomogram. A contrast CT suggested it to be an inspissated pus which was confirmed on ureteroscopy. This was the first time we found inspissated pus causing obstruction in lower ureter

UMP 01 – 12

Hydatid Cyst of Kidney: A Case Report

C S Agrawal, Nawal S, Karkee RJ

B P Koirala Institute of Health Sciences, Dharan Nepal

Introduction and objectives: Hydatid cyst of the kidney is relatively uncommon condition caused by the larval stage of Echinococcus granulosus. Primary involvement of the kidney without involvement of the liver and lungs is even more uncommon. We report a case of isolated hydatid cyst of the right kidney presented with pain and lump in the flank that was evaluated clinically, investigated and finally surgically treated by complete endocystectomy and partial pericystectomy. **Methods and Result:** **Case description:** A 46 years female presented with pain and lump in the right flank for 6 months. On examination, the right kidney was palpable. Ultrasonography revealed simple renal cortical cyst of 10x12 cm in the right kidney at lower pole that was further supported by CT scan. Intravenous pyelogram showed distortion of right pelvicalyceal system with splaying of lower pole calyces. As the cyst was symptomatic, therapeutic aspiration was done and 1.5 liters of clear fluid was aspirated. Review ultrasonography after therapeutic aspiration revealed floating membranes in the cyst, characteristic of hydatid cyst. Pre and postoperative 3 weeks cycle of Albendazole 400mg twice daily was given to the patient. Complete endocystectomy and partial pericystectomy of the hydatid cyst was done. Later on follow up at one year, she was symptom free and USG abdomen and pelvis revealed normal findings and no evidence of new cyst reappearance. **Conclusion:** Isolated renal hydatidosis is rare with varied clinical features. Kidney-sparing surgery protocol may be the best treatment for renal hydatid cyst. **Key words:** Hydatid cyst, Kidney, Partial Pericystectomy

UMP 01 – 13

Renal cell carcinoma presenting as dysphagia

Chauhan Sharad, Tomar V, Yadav S S, Priyadarshi S, Vyas N, Aggrawal N

SMS Hospital Jaipur

INTRODUCTION-Renal cell carcinoma presenting with dysphagia is rare. We report a case who presented with dysphagia and dyspnoea as the only manifestations of renal malignancy. Biopsy from the laryngopharyngeal lesion revealed a clear cell neoplasm. Immunohistochemical analysis of tissue from lesion confirmed metastasis of renal cell carcinoma. **CASE REPORT-**A 50 year old gentleman presented with dysphagia and dyspnoea of recent onset.

Physical examination was unremarkable. Otolaryngoscopy and upper gastrointestinal endoscopy revealed nodules in pyriform fossa, the biopsy was taken from the same, which revealed vacuolated cells with clear cytoplasm. DISCUSSION-Our patient had an unusual presentation of RCC, although dysphagia as a standalone symptom can have a myriad causes, metastasis from RCC can be considered in the differential diagnosis once other more common causes have been ruled out. In patient with metastatic disease in pharynx, renal primary tumour should be considered especially when metastasis has clear cell histology. It highlights the importance of timely search for a primary lesion in such a patient so that appropriate and timely management can be planned.

UMP 01 – 14

Penile Gangrene: A Case Report

Choudhary B, Desai K, Shah S, Shukla K, Sewag M, Singh R

Civil Hospital and B.J. Medical College, Ahmedabad

INTRODUCTION- Gangrene of the penis is rarely seen because of excellent collateral circulation of the perineum. Treatment options include penectomy and conservative therapy. Death occurs in 59% of affected patients within 6 months of onset. Therefore control of the underlying disease accompanied by a surgical penectomy is important. **CASE REPORT** A 45-year-old man with history of spontaneous paraparesis, presented at our department with pain and blackening of penile shaft and glans since 10 days. There is history of urgency and urge incontinence since 20 years. On digital rectal examination lax anal tone was noted. Upon admission, the patient looked chronically ill with paraparesis. Turbid urine was also noted. The laboratory data showed a white blood cell count of 28,000 with 78.9% neutrophil segments, hemoglobin of 13.9 g/L, albumin of 3.6 g/L, Sr ceratinine 1.53 and C-reactive protein of 18.56 mg/L. Urinalysis showed pyuria, bacteriuria, and proteinuria. Dry gangrene with eschar was noted on the shaft and glans penis. XRAY KUB posterior urethral stone. **DOPPLER STUDY** -Both corpora cavernosa appears engorged at base, dorsal artery of penis shows normal flow with PSV of 5 to 7 cm/sec. cavernosal artery doesn't show any colour flow, Both common iliac artery don't show color filling possibility of thrombosis, oth inferior epigastric arteries show reversal of flow and gives collateral supply to external iliac artery. **PROCEDURE DONE** -partial penectomy. **CONCLUSIONS** It is difficult to treat penile gangrene due to vascular complications. Penectomy and antibiotics treatments are essential for management. Close attention should be paid to the post-penectomy wounds, which are likely to poorly heal, especially in patients who have several systemic diseases. An early extensive penectomy and control of the underlying diseases are crucial for survival of patients with penile gangrene. It is also highly imperative to manage gangrenous changes to prevent sepsis progression.

UMP 01 – 15

Vascular anomalies in live donor nephrectomy : Our experience

Choudhuri S, Mishra JJ, Panda SS, Swain S, Singh GP, Hota D

SCB Medical College & Hospital, Cuttack

Introduction Laparoscopic live donor nephrectomy has become a well-accepted practice in most transplant units. However, the variations and complex of renal vasculature may make the surgery even more challenging during laparoscopic or open donor nephrectomy. The aims of this article are to review embryology of the renal vasculature development and the clinical significance of renal vasculature anomalies during laparoscopic donor nephrectomy and the consequence of kidney transplant. **Discussion** The results were interpreted and summarized as renal artery development and its anomalies and renal vein development and its anomalies including associated anomalies of the inferior vena cava. The clinical significance during laparoscopic donor nephrectomy was explored. The value of computed tomography angiography was emphasized during live donor work-up and before surgery planning. **Conclusion** It is paramount for surgeons to have a thorough knowledge of renal vasculature development and to readily identify the anomalies of renal vasculature on computed tomography angiography prior to laparoscopic or open donor nephrectomy. The adverse bleeding event can be therefore prevented

UMP 01 – 16

Renal Mucinous tubular and spindle cell carcinoma

D Srikanth Reddy

Narayana Medical College, Nellore

Introduction Mucinous tubular and spindle cell carcinoma of the kidney (MTSCC-K) is a rare pathological entity and has been described as a specific subtype of renal cell carcinoma (RCC) in the 2004 World Health Organization. 46 cases have been reported in the literature. **Case report** – 81 year-old man was diagnosed to have right renal mass on routine USG abdomen. Renal function test results were normal. A contrast enhanced computed tomography scan of the abdomen revealed 8.3 x 5.4cm well defined partially exophytic mildly homogenously enhancing mass lesion arising from the lower pole of Right kidney. Right laparoscopic partial nephrectomy was performed. Grossly, the tumour was soft and well-circumscribed, cut surface was grey white with foci of hemorrhage. Microscopically, the tumour was composed of compressed elongated tubular structures surrounded by spindle cells. Extra cellular mucin was abundant. Tumour cell nuclei were round with inconspicuous nucleoli, necrosis not seen. Stroma was populated by mono nuclear cells. **Discussion** - Mucinous tubular and spindle cell renal tumour is seen in adults, predominantly in women, and is typically detected as an asymptomatic renal mass. Grossly it is well circumscribed with a solid grey to white appearance on cut surface. Histologically- it is composed of cuboidal cells arranged in microtubules and long cords making abrupt transitions to spindle morphology and are arrayed in a mucinous or myxoid stroma that reacts strongly with alcian blue. Nuclear atypia and mitoses are rare in both cuboidal and spindle cells. It must be differentiated from papillary carcinoma with sarcomatoid change by absent atypia of cells and parallel arranged cells. **Conclusion:** The MTSCC-K has special clinicopathological characteristics, low degree of malignancy and relative good prognosis

UMP 01 – 17

Comparative evaluation of silodosin and tamsulosin in treatment of patients with lower urinary tract symptoms with benign prostatic hyperplasia

Devendra S Pawar, Ashok Kumar, Rajwardhan Singh, Santosh K Singh

Pt.B.D.Sharma PGIMS Rohtak

Objective: We assessed the efficacy and safety of two $\alpha 1$ -adrenoreceptor antagonists, tamsulosin and silodosin, in the treatment of male urinary tract symptoms. **Method:** Men age more than 45 years with symptomatic BPH (increased day time frequency, urgency and nocturia and or voiding symptoms (hesitancy, incomplete voiding, impaired stream or interruption of stream), increased day time micturition, nocturia >2, maximum flow rate <15 ml/sec with a voided volume of at least 150 ml, postvoid residual urine less than 100 ml by abdominal ultrasound, IPSS >13 points, international prostatic symptom bother score >3 points. 120 patients were randomized in two groups. Patients were divided into two groups by computer generated simple randomized analysis into: Group 1 (tamsulosin group) 60 patients were administered 0.4 mg tamsulosin once daily for three months. Group 2 (silodosin group) 60 patients were administered 8 mg silodosin once daily for three months. **Evaluation** included clinical determination of IPSS, quality-of-life index, maximum flow rate (ml/s), time to maximum flow, average flow rate, average flow time, postvoid residual urine volume and prostate size by transabdominal ultrasonographically at inclusion, 1 month and 3 month. **Results:** A total of 120 men, 60 in group T and 60 in group S, were treated and all patients completed the treatment. IPSS, quality-of-life index, maximum flow rate (ml/s), time to maximum flow, average flow rate, average flow time, postvoid residual urine volume were improved in both groups after treatment. The changes in the total IPSS from baseline in S and T groups at three month were -6.6 and -7.5, respectively. There was no significant difference between the two groups. Eleven and none patients experienced adverse events during silodosin and tamsulosin treatment respectively. **Conclusion:** Two types of $\alpha 1$ -adrenoreceptor antagonists in the treated groups were similar in efficacy. Profile and difference of drug should be considered in making treatment choice.

UMP 01 – 18**A rare case of lower ureteric carcinoma with ipsilateral non functioning kidney****Dharwadkar Sachin, Nayak SV, Prasad HL, Sreenivas J, Nagaraja NH**

Institute of Nephro Urology, Bangalore

Introduction and Objective: Ureter is the least common location for transitional cell carcinoma of urinary tract. It accounts for 1 % of all upper urinary tract malignancies. Overall about 70 % occur in lower ureter, 25 % in mid ureter and 5 % in upper ureter. Most common presenting symptom is hematuria either gross or microscopic. Flank pain is second most common symptom occurring in 30 % of tumours. About 15 % of patients are asymptomatic at presentation and are diagnosed when an incidental lesion is found on radiologic evaluation. Lower ureteric carcinoma with non functioning kidney have rarely been reported. **Methods:** Case report and review of pertinent English literature. **Results:** A 51-year old male presented for evaluation of Left flank pain of 15 days duration. Clinical examination revealed tenderness and bimanually palpable mass in left lumbar region. USG abdomen and pelvis showed Left lower ureter mass lesion measuring 7 cm with gross left hydronephrosis. CECT KUB revealed minimally enhancing circumferential mural thickening (maximum thickness of 9.8 mm) of left distal ureter extending from VUJ upto 10 cm proximally causing gross hydronephrosis. No excretion of contrast from left kidney. Cystoscopy was normal. ^{99m}Tc – EC renal scan revealed non functional left kidney. Split function 0 % on left side and 100 % on right side. Patient underwent Left Nephroureterectomy. Post operative period was uneventful. Histopathology showed low grade papillary urothelial carcinoma. **Conclusion** Ureteric carcinoma usually presents as hematuria. Presentation with flank pain and associated with ipsilateral non-functioning kidney is uncommon.

UMP 01 – 19**A large renal leiomyoma in young male: Diagnostic dilemma****Durga Prasad Bendapudi, Deepak Ranjan K, Sudheer K Devana, Ravi Mohan SM**

PGIMER, Chandigarh

Introduction: Renal leiomyomas are rare benign tumors mostly seen in women in 2nd to 5th decades of life. They are generally small and are usually incidentally detected. We report a large renal leiomyoma in a teenage male mimicking a malignant renal neoplasm. **Case report** A 19 yr male presented with left flank pain for 4 months. Examination revealed a large palpable firm lump in the left lumbar region. His routine investigations were normal. Ultrasound shows a large hyperechoic mass in the left renal fossa. Contrast enhanced computed tomography scan showed a 17 × 11 × 15 cms heterogeneously enhancing mass almost completely replacing left kidney with no lymphadenopathy. The left renal artery was compressed and splayed by the mass. Fine needle aspiration cytology showed fibrocollagenous tissue with scattered spindle cells with no features suggestive of malignancy. After preoperative angioembolisation the patient underwent radical nephrectomy. Gross cut section showed a 16x8 cms capsulated firm multilobated tumor with peripherally compressed renal parenchyma. Renal pelvis was free of tumor. Histopathology was suggestive of leiomyoma of kidney. **Conclusions** Renal leiomyoma can present occasionally as large enhancing renal mass like in our case. Preoperative diagnosis is difficult. It should be kept in the differential diagnosis of well circumscribed enhancing renal masses. Surgical excision offers cure in these cases.

UMP 01 – 20**Novel management of hematocolpos****Ezhilarasu, Ramesh Babu, Venkatramanan, Sunil Shroff**

Pediatric Urology Unit, Sri Ramachandra Medical College, Porur, Chennai

Aim: To report and discuss a novel management of hematocolpos in a post transplant patient **Methods:** A 15-yr old girl with past history of anoplasty at birth, ASD repair at 6 month, reimplantation at 1 year of age for single kidney ectopic ureter, and renal transplantation one year ago for CKD

was admitted with cyclical abdominal pain. Evaluation with USG revealed hematocolpos causing pressure effects on bladder and mild hydronephrosis of transplant and native kidney. MRI revealed high vaginal atresia. **Results:** Under ultrasound guidance, a needle was inserted from the site of vaginal atresia (perineum) into hematocolpos. Dilatation was performed over guidewire using PCNL dilators. On complete drainage of hematocolpos, collapsed vagina could be pulled down for perineal vaginoplasty. **Discussion:** Defects in the normal development the urogenital sinus or the Mullerian duct can result in vaginal atresia and subsequent hematocolpos. In those with Mayer Rokitansky Kustner Hauser syndrome and MURCS, associated cardiac and anorectal defects are seen. High vaginal atresia often requires abdomino perineal approach. Our patient being post transplant, abdominal approach could have been complicated and USG guided dilatations and drainage helped to achieve perineal vaginoplasty. This technique has not been reported so far.

UMP 01 – 21**Squamous cell carcinoma arising from bladder diverticulum -a case report****GV Charan Kumar, Rahul Devraj, PVLN Murthy, Ramreddy, Vidya Sagar, Ramachandraiah**

Nizams Institute of Medical Sciences, Hyderabad

INTRODUCTION: Primary squamous cell carcinoma of the bladder is a relatively rare tumor, comprising 1% to 7% of all bladder cancers. carcinoma arising from bladder diverticulum has a poorer prognosis than do neoplasms that originate within the main bladder lumen as a result of early transmural tumor infiltration. Transurethral resection, partial cystectomy, radiation therapy and chemotherapy are not effective. Radical cystectomy and urinary diversion appear to be the treatment of choice in selected cases. **CASE REPORT:** A 52 year old female presented with complaints of poor urinary flow and sensation of incomplete emptying of bladder for the past 3 years. on screening ultrasound, she was found to have urinary bladder diverticular growth. TUR biopsy taken and histopathological examination showed well differentiated squamous cell carcinoma. General physical examination and local examination unremarkable. Investigations – complete blood picture, complete urine examination are within normal limits. serum creatinine 0.7 mg/dl, serum electrolytes, liver function tests are within normal limits. Contrast enhanced CT scan – suggestive of diverticulum of 4x3.1 cm noted in the right lateral wall of urinary bladder. 1.9x1.8 cm solid enhancing lesion present in the diverticulum. chest x-ray and bone scan are normal. radical cystectomy and ileal conduit was done to remove the lesion and the histopathological examination suggestive of squamous cell carcinoma of urinary bladder. **DISCUSSION:** The incidence of bladder diverticulum is approximately 1.7% in children and 6% in adults. Dysplasia, leukoplakia, and squamous metaplasia may develop in approximately 80% of diverticulum. Chronic infection and inflammation, secondary to urinary stasis have been suggested as the cause of this situation. Bladder tumors arising inside of a diverticulum are uncommon, with a reported incidence ranging from 0.8% to 10%. The most common histological subtype of diverticulum tumors are transitional cell carcinoma (TCC) and squamous cell carcinoma (SCC), constitute 70-80% and 20-25% of all tumors respectively. Urologists should be vigilant in this regard and diverticulum should be managed before complications occur.

UMP 01 – 22**Bipolar versus monopolar transurethral prostate resection: Comparison of biochemical changes and complications****Gaude V, Sankapal P, Chari PD, Dias B, Prabhudessai MR, Thatte SW**

Goa Medical College

INTRODUCTION AND OBJECTIVE: TURP is a standard operative procedure for patients with BPH. Irrigants used include distilled water and non-hemolytic solutions like glycine, saline, sorbitol and mannitol. Irrigant fluid absorption by patients is a potentially serious complication of TURP, resulting in the TURP syndrome with appreciable morbidity and mortality. Our aim was to compare the usage of 'bipolar cautery using saline as an irrigant' with 'conventional monopolar cautery using glycine' with regards to biochemical changes and complications. **MATERIALS**

AND METHODS: 30 patients who underwent TURP from March 2013 to April 2014 were studied in 2 groups: Bipolar TURP using saline (n=15) and Monopolar TURP using glycine (n=15). Hemodynamic status (spO₂ & NIBP), biochemical parameters (pre & post operative Hb and Se. Sodium levels) and complications were studied. Exclusion criteria were: prostate > 90gm, neurogenic bladder, suspected prostate cancer, associated bladder calculus, urethral stricture and CKD. **RESULTS:** Mean preoperative prostate size - 56.96cc. Mean resection time was 83.13 min (glycine) and 80.20 min (saline). Bipolar saline group showed smaller decline in serum sodium (1.47meq/L) compared to monopolar glycine group (2.73meq/L). No significant decline in Hb, oxygen saturation (spO₂) and non invasive blood pressure (NIBP) was seen in both groups. No TUR syndrome was seen in either group. **CONCLUSION:** Bipolar saline TURP is clinically comparable to monopolar TURP using glycine. Bipolar saline TURP has advantages of smaller decline in serum Na and Hb levels and reduced irrigation fluid requirement. However a larger number of patients with longer study period is necessary.

UMP 01 – 23

Upper tract transitional cell carcinoma in a non-functioning kidney secondary to congenital uretero-pelvic junction obstruction:- A rare presentation

Gaurav Kumar, Pawan Vasudeva, Anup Kumar, Harbinder Singh, Sanjeev Jha, Rohit Kumar

VMMC & Safdarjang Hospital New Delhi

A 54 years old male chronic smoker presented with hematuria 13 years after the diagnosis of asymptomatic non-functioning Left kidney secondary to ureteropelvic junction obstruction. On evaluation, he was diagnosed with renal collecting system mass, for which radical nephroureterectomy with bladder cuff excision was done. Histopathology revealed upper tract transitional cell carcinoma. Manuscript A 54year old male, chronic smoker, was diagnosed with an asymptomatic non-functioning left kidney secondary to congenital ureteropelvic junction obstruction (UPJO) during routine health check up 13 years back. He refused surgical intervention and was lost to follow up till 10 months back, when he presented with gross painless hematuria. Physical examination revealed a 15x15 cms left renal lump, urinalysis showed 100RBCs/HPF and urine cytology was negative for malignant cells. CT Urography revealed left gross hydronephrosis with thinned out renal parenchyma and a 8x7x6 cms enhancing soft tissue mass occupying the collecting system in lower pole region. He underwent radical nephroureterectomy with bladder cuff excision along with lymph node dissection from renal hilum to aortic bifurcation. Histopathology revealed high grade transitional cell carcinoma (TCC) (stage pT4,N0,M0). Now, patient is asymptomatic and in regular follow up for 8 months.

UMP 02 – 01

Surgical management of non functioning page kidney presenting as renal mass : our institution experience

Gaurav Prakash, Sankhwar Satyanaryan, Dalela Diwakar, Singh Bhupendra Pal, Kumar Manoj, Singh Manmeet

KG MU Lucknow

Objective and Introduction: caused by compression of renal parenchyma by a subcapsular hematoma. Both traumatic and spontaneous bleeding etiologies have been reported. Renal mass lesions and flank pain may also result as a clinical features of Page kidney. The Page kidney phenomenon refers to any extra-renal process causing significant compression of the parenchyma, leading to hypoperfusion and ischemia with subsequent activation of the renin-angiotensin-aldosterone axis. The initial management may be divided between antihypertensive treatment only and a combined surgical approach based on drainage of the subcapsular renal hematoma and in extreme cases total nephrectomy. **Material & Methods :** Here two case have been reported suggestive to be a case of page kidney .we aimed to review patients with Page kidney at our institution by analyzing presenting features, clinical findings, diagnostic techniques, and treatment interventions. **Case1:** A 24 year male presented h/o RTA 6 years back presented with on off Lt flank pain x 6 months. On examination non-tender mass present over Lt flank region was found .Urine culture was sterile.Renal function was within normal limit On evaluation with USG he was found to have Lt renal mass. On further evaluation with CT abdomen was found

to have huge subcapsular hematoma surrounding Lt kidney with minimal parenchyma . After proper counselling he underwent Lap nephrectomy Intraoperatively : a mass was found densely adherent to psoas muscle and surrounding structure. **Case 2 :** An 21-year-old male presented to us with chief c/o Rt flank pain for last 2 years.He had h/o fall from height 12 years back. At that time he had H/o painless lump at Rt flank region which gradually resolved. Pt also had episodes of hematuria which spontaneously resolved.Now on admission he was evaluated :On examination a non tender mass was present in Rt flank region.24 hrs urine output was adequate.His blood pressure was 136/62 mmHg and pulse was 72 beats/min. he was not taking any drug. urine culture was sterile and renal function was within normal limit. A detailed clinical workup was performed, and included a abdominal CT , which demonstrated a huge subcapsular hematoma of the Rt kidney with no active bleeding with minimal parenchyma visible.He was further evaluated with Renal DTPA scan and found to have split GFR 4% with total GFR 62 ml/min. After proper counselling he underwent Lap nephrectomy .Whole the kidney was found eccentrically palced with minimal parenchyma present . Intraop finding : tissue was densely adherent to wall of IVC and duodenum. **Conclusion:** Presentation of page kidney is variable and can be presented as renal mass with poor functioning.Lap nephrectomy could be on the option for mangement.

UMP 02 – 02

Fracture of DJ stent following ESWL

Harbinder Singh, Pawan Vasudeva, Anup Kumar, Sanjeev Kumar Jha, Rohit Kumar, Gaurav Kumar

Safdarjang Hospital Delhi

Extracorporeal shock wave lithotripsy is a widely used modality for the treatment of renal and ureteric stones.In majority of the cases placement of a DJ stent prior to ESWL is not needed. However in certain situations like large stone burden DJ stent placement is required before ESWL. There are several complications associated with stent placement like stent migration, stent blockage, encrustation and stone formation. We are reporting a rarest complication of DJ stent fracture following stented ESWL in a 13 year old girl and its successful management by ureteroscopy. There are only 2 reported cases of fracture of DJ stent following ESWL (Moskovitz et al) .Our case is unique because of the fact that stent fracture occurred within 2 weeks of placement whereas in previously reported cases the fractured stents were in situ for prolonged period(5-6 months). A 13 year old girl presented with left flank pain for 6 months.On evaluation she was diagnosed as a case of left renal stone measuring 2.2cm with b/l normally excreting kidneys. Patient was planned for PCNL but she wanted a trial of ESWL before being considered for PCNL. In view of large stone burden a 5 FR DJ stent was placed and patient subjected to ESWL. Patient recieved one session of ESWL 2500 shocks and was advised to follow up after 3 weeks with X ray of KUB region. The follow up X ray showed complete stone clearance with fractured DJ stent. The patient was admitted and the fractured stent removed ureteroscopically under general anesthesia.

UMP 02 – 03

Primary Bladder Endometriosis

Jagdeep Singh, Vikraman, Giriraj,Saurabh, Jitendra

KIMS Hospital, Trivandrum

Objective- Reporting a case of isolated bladder endometriosis Endometriosis is a common benign gynecological disease characterized by the presence of ectopic endometrial tissue outside the uterus. Endometriosis most commonly affects such organs as the ovaries, utero-sacral ligaments, uterine tubes, pouch of Douglas, and rectum. Ureters are sometimes stenosed by the growth of endometriotic tissue around them. The bladder, however, is an infrequent site of endometriosis localization, and it is estimated that only 1% of patients suffering from this disease have lesions involving the urinary system. Fewer than 200 cases of bladder endometriosis have been described in the literature. We report a case of isolated urinary bladder endometriosis in 36 years old patient who presented with right lower abdominal pain and dysmenorrhoea with dysuria since 2 years.She was evaluated and found to have bladder lesion. Other abdominal and pelvic organs were found to be normal on CECT abdomen and pelvis. She was managed with Transurethral resection of bladder mass which histologically proved to be bladder endometriosis.Patient is under follow up in collaboration with gynaecologist and doing well 6 months follow up.

UMP 02 – 04**Clinical case report of rare type of enterovesical fistula i.e., appendicovesical fistula****Jay Dharamshi, MA Siddiqui, M Sane, G Shah, Ashish Gupta, S Bote, S Patil**

JJ Group of Hospitals, Mumbai

Appendicovesical fistula is an uncommon type of enterovesical fistula and rare complication of unrecognized appendicitis or tumors of appendix. Appendicovesical fistula often presents with recurrent or persistent urinary tract infection, especially in men. The commonest causes are appendicitis, cecal diverticulitis, and cystadenocarcinoma or carcinoid tumors of appendix. The diagnosis of this kind of fistula is difficult because the symptoms are often mild and ambiguous. The average time between first symptom and diagnosis is almost one year in spite of medical progress today. Consequently it often results in delayed therapeutic intervention. We experienced 45 years old male, who is diagnosed case of rheumatoid arthritis on regular steroid drug treatment, presented with complaint of passage of digested food particles in urine, hematuria and foul smelling urine. The patient underwent CT Scan Abdomen and appendicovesical fistula was confirmed and managed by operative intervention. This unusual case is presented and a brief review of this clinical entity is also included.

UMP 02 – 05**Papillary renal cell carcinoma with chromophobe differentiation – case report a rare presentation****Jayaprakash N, Aysha Shaheen B, ThiruvavulPV, PeriyasamyP, DeepakM, PitchaibalashanmugamK, GovindarajanP**

Stanley Medical College, Chennai

Introduction and objectives Renal cell carcinoma is the most common neoplasm of the kidney. It is a heterogeneous disease, comprised of different histological subtypes. Chromophobe renal cell carcinoma is a rare variant and accounts for 5% of all cases. The coexistence of different subtypes of renal cell carcinoma (RCC) within a single tumour is an extremely unusual entity. **Method** 60 year old female presented with left loin pain for 3 months. Patient underwent cholecystectomy with mesh repair for ventral hernia 5 years ago, peri operative period uneventful. On per abdomen soft, midline scar present was healthy. No mass palpable. CECT shows Irregular 4 x 3.5 cm hypodense lesion in lower pole left kidney with minimal enhancement S/O Bosniak Class 4 cyst with no evidence of metastasis. Results Clinically diagnosed as Left renal tumour (stage I – T1N0M0) & proceed with left Lower polar nephrectomy. **Histopathology** results found to be Infiltrating neoplasm composed of papillary area intervened by cyst with areas of chromophobe differentiation which is characterized by large polygonal cells with perinuclear clearing or “halo,” suggestive of papillary variant with chromophobe differentiation – a rare presentation. **Conclusion** Very few reports in the literature describe double or triple synchronous renal neoplasms. This is the rare presentation, which might trigger further investigation on the RCC pathogenesis theories.

UMP 02 – 06**Partial nephrectomy for renal tumours : a reappraisal****Jayesh Mittal, R Manikandan, K Muruganandham, LN Dorairajan, Amit Mishra, Santosh Kumar**

JIPMER, Pondicherry

Background : The traditional recommendation for surgery for suspected renal tumors had been radical nephrectomy. In recent years, the surgical treatment of T1 renal cell carcinoma (RCC) has developed towards conservative surgery and the use of minimally invasive techniques. Simultaneously the refinements in imaging technologies have made it easier to diagnose preoperatively certain benign tumours. We review our experience in partial nephrectomy in the last 3 years to understand its scope in present day urology practice. **Method :** Patient records and databases were reviewed for 14 consecutive patients undergoing PN (11 open and 3 laparoscopic) since January 2011. Clinical, pathological, and radiographic data were obtained. **Results :** The indications for PN included RCC (9 cases including a complex cyst), benign renal tumor (4 cases), renal trauma (1 case). Mean age of patient was 50.6 years (range 27 to 73). Mean tumor size

was 6.4 cm. (range 1.6 to 15). Most common location of tumour was lower pole, followed by upper pole. Mean surgical time was 206 minutes (range, 105 to 250) and mean blood loss was 805 cc (range 350 to 2000). Mean blood transfusion was 2.2 units (range 0 to 6). Intra op cooling was used in 3 patients. Average day of drain removal was 7th POD (range 2nd to 20th). 4 patients developed prolonged drain output, out of them 2 required DJ stenting. Out of 4 patients, 1 developed perinephric collection and pleural effusion requiring pigtail insertion. Average hospital stay was 10.9 days (range 3 to 22). Laparoscopic PN showed lower blood loss and transfusion rate than open PN. Similarly cases where kidney had been cooled during open PN as compared to those not cooled showed a larger tumour size (8.5cm vs. 4.9cm) and a higher intraoperative blood loss, transfusion rate, postoperative drainage and hospital stay.. Follow up ranged from 1 to 42 months. No patient has had disease recurrence. In one patient the residual kidney showed atrophy on ultrasound and nuclear scan. In the rest the kidneys were functioning well.

UMP 02 – 07**Penile Mondor’s disease : a rare case report****Jeeban Jyoti Mishra, Pattanaik A, Choudhuri S, Panda SS, Singh GP, Hota D**

SCB Medical College, Cuttack

Introduction Thrombosis or superficial thrombophlebitis of superficial dorsal vein of penis, is known as penile Mondor’s disease. **Case presentation** A 35 yr old healthy physically fit male came to our outdoor complaining of painful swelling over the dorsal aspect of penis especially during erection. **Ultrasonography** of the swelling revealed non-compressible superficial dorsal vein of penis and Doppler USG showed no venous flow signal. The patient treated conservatively. **Conclusion** Penile Mondor’s disease is rare clinical entity with which a patient comes with considerable psychological stress and anxiety. As it is a benign condition and usually self limited, every urologist should be aware of it.

UMP 02 – 08**A rare case of urethral duplication managed by simple meatal correction****JosephS, Piyush Singhanian, Nitin Joshi, Sanish Shringarpure, Rajpal Lamba, Nandkishor Raut**

MGM Medical College and Hospital, Navi Mumbai

Urethral Duplication is a rare congenital anomaly. Although a number of theories have been proposed to describe the embryology of the condition, the actual mechanism of the disorder is still unclear. We report here a case of urethral duplication in a 25 year old male complaining of poor flow of urine and double stream who was treated successfully with simple meatal correction surgery. **Key words:** urethra, abnormalities, duplication

UMP 02 – 09**Oncocytic Adrenocortical carcinoma– A rare pathological variant****Kalra Sidhartha, Manikandan R, Srinivas BH, Dorairajan LN, Muruganandham K, Anil Verma, Santosh Kumar**

JIPMER Pondicherry

INTRODUCTION AND OBJECTIVE: Oncocytic adrenocortical carcinoma (OAC) is a rare histopathological variant with less than 50 cases reported in literature till date. With progressive research, new insights has emerged in the molecular profiling of these tumors. This has led to much more clarity in reporting of this tumor. We report a case of oncocytic adrenocortical carcinoma with its attending clinical presentation, immunohistochemical profiling and electron microscopy findings. **METHODS and RESULTS :** A 34 year male underwent left open adrenalectomy for an incidentally detected suprarenal mass. He did not have any clinical and laboratory endocrine abnormality. **Histopathological examination** of the mass revealed sheets of tumor cells with abundant amount of eosinophilic granular cytoplasm, central to eccentrically placed nuclei with marked degree of nuclear atypia and atypical mitosis. **Immunohistochemistry (IHC)** these cells were positive for inhibin and melanin A while negative for chromogranin. **Electron microscopy** showed

round to oval cells with plenty of membrane bound secretory granules with few cells showing large number of mitochondria. Based on histopathological and electron microscopic features, a diagnosis of OAC was considered. Conclusion OAC is a small subset of oncocytic adrenocortical neoplasms classified on the basis of Lin-Weiss-Bisceglia (LWB) system. The incidence of hormonal production and locally advanced disease is uncommon in OAC compared to conventional adrenocortical carcinoma (AC). The overall median survival for these tumors is around 58 months which is superior to AC. Thus it is important to discriminate these oncocytic adrenal neoplasms on the basis of LWB as applying the Weiss system of classification to this subset of adrenocortical neoplasms will lead to a diagnosis of AC.

UMP 02 – 10

Synchronously detected linitus plastica type secondary bladder cancer from stomach masquerading as genitourinary tuberculosis

Kalra Sidhartha, Manikandan R, Dorairajan LN, Muruganandham K, Kumar Santosh, Verma Anil

JIPMER Pondicherry

INTRODUCTION AND OBJECTIVE Gastric cancer represents 4% of primary for secondary urinary bladder malignancy. However most of these cases present metachronously with patients having advanced gastric cancer or late metastasis after primary treatment of the stomach cancer. We report a case of metastatic bladder cancer from stomach clinically presenting as genitourinary tuberculosis detected synchronously while being evaluated for lower urinary tract symptoms. **METHODS** : A 60 year old gentleman diagnosed as a case of genitourinary tuberculosis (GUTB) on clinical grounds and a positive urinary polymerase chain reaction for tubercular bacilli (PCR) was referred for further management. CECT abdomen and pelvis which showed a diffusely thickened urinary bladder with a diffusely thickened stomach with abdominal ascites. Biopsy from bladder came as poorly differentiated adenocarcinoma immunohistochemically positive for CDX2. Considering the biopsy report and CECT findings he underwent upper gastrointestinal endoscopy which showed multiple small ulcerative lesions biopsy of which revealed adenocarcinoma of stomach. **RESULTS AND CONCLUSION**: Diffuse type of secondary bladder cancers presents with irritable bladder symptoms without gross hematuria and can be confused with inflammatory conditions. Most of the gastrointestinal adenocarcinomas express CDX2 and positive staining of it in urinary bladder adenocarcinoma suggests a secondary origin in the appropriate clinical setting. Diagnosis of these inflammatory pathologies such as GUTB depends on the clinico-radiological and laboratory investigations none of which is 100% accurate independently. Most common cause of a false positive PCR is carryover amplicon contamination. Thus definitive evidence in the form of biopsy should be aimed for in these clinical situations so as not to miss an underlying malignancy.

UMP 02 – 11

Vesical paraganglioma: case report

Kanekar S, Khan MA, Gowda R, Murali V, Jain N

Apollo Hospitals, Chennai

INTRODUCTION AND OBJECTIVES: Vesical Paragangliomas are rare tumours arising from chromaffin tissue of bladder wall. It comprises 6% of extra-adrenal Phaeochromocytomas. It may present with symptoms of Catecholamine excess associated with micturition and is confused with Urothelial tumour because of histomorphological overlap. We present here a case report of Vesical Paraganglioma treated at our institution. **STUDY METHODS**: A 23 years Hypertensive male on single drug treatment presented with lower abdominal pain and frequency. He was noted to have a irregular mass measuring 3.2 x 4.5 x 4.5 cms around right vesico-ureteric junction in the bladder with right hydronephrosis. Fat plane between the seminal vesicle was lost and there was an enhancing common iliac lymph node. Urinary Vanillyl Mandelic Acid was raised with normal metanephrine levels. Galium-68 DOTATATE PET-CT revealed increased activity in the mass and lymph node. Cystoscopy revealed extramural mass distorting the right ureteric orifice. Biopsy was positive for Paraganglioma confirmed with Immunohistochemistry. His blood pressure was controlled with Phenoxybenzamine and later he underwent Open Partial Cystectomy with Right Uretero-neocystostomy.

RESULTS: He remained stable in peri-operative period except for transient rise in blood pressure while handling of tumour. He had transient diuresis which normalised after few days. Foley catheter was removed on 4th post-operative day and suprapubic cystostomy removed after 1 week. Histopathology revealed Paraganglioma with negative lymph nodes. Repeat PET-CT did not reveal any residual mass. His blood pressure also normalised. **CONCLUSION**: Vesical Paragangliomas, need a degree of suspicion especially in Hypertensive patients presenting with Bladder tumours at early age. Immunohistochemistry helps in alleviating doubts of Urothelial malignancy. Follow up is required to rule out any recurrence

UMP 02 – 12

Congenital obstructive megaureter with urolithiasis

Karrthik, Ayesha Shaheen, PVThiruvvarul, PPeriasamy, MDeepak, Pitchai Balashanmugam, PGovindarajan

Stanley Medical College, Chennai

The primary presentation of congenital megaureter in adults is rare. Development of urolithiasis may lead to this unusual underlying diagnosis. Urinary tract stones can form either within the dilated ureteral segment or in a part of the upper urinary tract proximal to the abnormal ureteral segment. We report two cases of nephrolithiasis that occurred in adults found to have primary obstructive megaureter. **Materials and methods**: case 1: A 16-year-old boy presented with isolated left lower quadrant pain. Computed tomography (CT) scan revealed a 2-cm stone in a dilated segment of his left distal ureter. Ureteroscopic intervention was not possible due to difficulty in negotiating obstructed segment. Ureteric reimplantation by modified leadbetter politano operation following hendren's ureteral tailoring was done. case 2: A 38-year-old man presented with left-side flank pain. Computed tomography showed a 20-mm non-obstructing calculus in the lower pole of left kidney with hydronephrosis and no renal parenchymal thinning. Percutaneous nephrolithotomy was performed by lower pole puncture for left renal calculus. Laparoscopic ureteric reimplantation was performed by extra vesical litch-gregoir method after excision of the distal obstructed segment. **Conclusion**: Typically, stones will develop within the dilated ureteral segment. Atypically, stones may develop away from the site of abnormality (case 2). Although rare condition in adults, congenital megaureter may present when kidney stones develop. Congenital megaureter is a diagnosis that urologists and radiologists need to consider in the setting of isolated distal ureteral dilation, as the diagnosis of adult megaureter may require more involved surgical measures to prevent recurrence of adverse symptoms.

UMP 02 – 13

Renal Lymphangiectasia

Kaushal Kumar, Ahsan Ahmed, Nikhil Ranjan, Rana Pratap Singh, Rajesh Tiwari, Vijoy Kumar, Mahendra Singh

Indira Gandhi Institute of Medical Sciences, Patna

Introduction: Renal lymphangiectasia is a rare renal condition characterized by dilatation of perirenal, peripelvic and intrarenal lymphatic vessels. Familial, developmental and acquired causes has been suggested. Clinical signs and symptoms are non specific and characteristic findings on ultrasonography, CT scan or MRI is the main stay of diagnosis. **Case history**: A 32 years female presented with recent history of intermittent low grade bilateral flank pain. Physical examination and renal function test was normal. Her blood pressure was 160/90. Ultrasonography revealed bilateral perirenal and parapelvic septated collection with increased echotexture and enlarged kidneys. CT scan added normal excretion of contrast from both kidneys without any extravasation ruling out any communication with pelvic calyceal system. USG guided aspirated fluid showed few lymphocytes with abundant protein and renin. No organism was isolated from aspirated fluid. A diagnosis of bilateral renal lymphangiectasia was made Patient was treated with antihypertensive, salt restriction and analgesic. On follow up visit, the patient was asymptomatic and normotensive. **Discussion**: The exact pathophysiology of renal lymphangiectasia is unclear. Patients may present with flank pain, abdominal mass, lower extremities edema, gross hematuria, ascites or hypertension. Diagnosis can be made on the basis of characteristic findings on USG, CT scan and MRI. Needle aspiration of chylous fluid and presence of renin confirms diagnosis. Symptomatic cases may require percutaneous aspiration or marsupialization of cyst. Rarely, renal vein thrombosis needs nephrectomy. **Conclusion**: Knowledge of this

condition is necessary while making differential diagnosis of other cystic renal masses and other causes of perinephric fluid collections.

UMP 02 – 14

Intrabdominal Seminoma

Kaushal Patel

Sri Sathya Sai Institute of Higher Medical Sciences, Puttaparthi

The incidence of undescended testis is 1% to 4% in full-term infants and 1% to 45% in preterm. Out of incidence of abdominal testis is approximately 25%. Relative risk of malignancy is 2 to 8 and may be 2 to 3 after prepubertal orchiopexy. Our patient is a 24 year old. Patient was incidentally diagnosed having pelvic mass on routine ultrasonography evaluation for penoscrotal hypospadias with left undescended testis and right small testis. Ultrasonography revealed a well defined predominantly heteroechoic solid lesion measuring 11.3 x 10.6 x 6.5 cm seen in the pelvis adjacent to the bladder abutting the right psoas muscle with calcification and vascularity on Doppler. TUMOR MARKERS-LDH- 1116 U/L (85-227 U/L). B HCG- 24.5 ML U/ML (MALE- < 10). AFP- 2.9 NG/ML. Contrast enhanced CT was suggestive of well defined heterogenous mass measuring 8 x 13 x 13 (AP x ML x CC) showing patchy post contrast enhancement with necrotic areas. Massive Paraortic lymphadenopathy noted. Exploratory laparotomy was done and mass was excised. Histopatho report suggested classic type seminoma. Patient was then referred to medical oncologist for chemotherapy. Testicular tumors can present as abdominal mass and clinicians need to be aware of that.

UMP 02 – 15

Bellini duct carcinoma: case report and review of literature

Khan Sartaj Wali, Rathi Vazir Singh, Patnaik Pranab, Shaw Dipak Kumar, Trivedi S, Dwivedi US

BHU Varanasi

Introduction & Objective: Carcinoma of the collecting ducts of Bellini is a rare subtype of RCC. A review of worldwide English literature identified a total of approximately 120 cases. The overwhelming majority of reported cases were high grade, advanced stage and metastatic at presentation and most exhibited poor prognosis. Renal medullary carcinoma shares many histologic features with collecting duct carcinoma, and some consider it a subtype of collecting duct carcinoma or a closely related tumor. Renal medullary carcinoma is seen exclusively in association with sickle cell trait. The study reports a case of Bellini duct Carcinoma in a patient with Sickle cell trait. **Methods:** A 40 yr. old male presented with vague abdominal pain since 6 months. There was no h/o hematuria or loss of weight or any other systemic or metastatic symptoms. CT abdomen subsequently showed rounded right renal mass of 4.6 cm without invasion of Gerota's fascia. **Results:** The patient underwent radical nephrectomy. Per operatively renal vein & IVC were found free of tumor infiltration & no lymphadenopathy was identified. The histopathology report came out to be Bellini duct carcinoma without capsular breach or perinephric involvement. Subsequently patient was further evaluated & found to have sickle cell trait. **Conclusion:** Bellini duct carcinoma represents a rare variant of RCC seen in younger patients. The diagnosis is usually made on HPE of resected specimen. The tumor is usually advanced at presentation but our patient had localized tumor and an R0 resection was achieved with good surgical result.

UMP 02 – 16

Holistic approach to missed upper tract TCC

Kirthik V, Kuppurajan N

Kovai Medical center and Hospital, Coimbatore

Introduction & objective Upper tract TCC uncommon compare to bladder tumor. We are presenting a young lady of 32 years who presented initially as loin pain and found to have obstruction and underwent balloon dilatation in overseas. 3 months later she presented to us with locally advanced TCC encircling Inferior Vena cava and possibly infiltrating Duodenum **Objective :** Radical resection and reconstruction in advance TCC - IS IT WORTHWHILE!! **Methods** It is a case study. A 32 years old lady presented

with 3 months after balloon dilatation with recurrent pain. she was initially evaluated with CECT of Abdomen ,PETCT, & CT guided biopsy which confirmed TCC, locally involving IVC and possibly Duodenum. A case was discussed in tumor board and had 2 cycles of carboplatin based chemotherapy without significant improvement. Considering young age we opted for surgical excision with the help of surgical gastroenterologist and vascular surgeon, after discussing in our tumor board. She had radical surgery, which included right nephrectomy with cuff of Duodenum and IVC. Reconstruction IVC was done with left IJV patch and Whipple's procedure was done. operating time was 18 hours. Results Patient had stormy post op course, involving pancreatic fistula, which was resolve with conservative treatment. She had follow up PETCT after 4 months which has shown recurrence in periportal and retrocaval nodes On reviewing CT scan done in USA, there was mass lesion in lower calyx and pelvis. **Conclusion** Complex resection involving nephrectomy IVC reconstruction and Whipple's procedure can be done with available surgical expertise but undoubtedly best time to cure a cancer is at early stage

UMP 02 – 17

Adrenal schwannoma: a rare adrenal incidentaloma

Kumar S, Ratkal C S, Sreelakshmi K, Shivalingaiah M

Institute of Nephrourology, Bangalore

Introduction: Adrenal schwannomas are very rare tumors that are difficult to diagnose preoperatively. We report a case of right adrenal schwannoma in a patient of recurrent Angiolymphoid Hyperplasia with Eosinophilia (ALHE). **Methods:** A 42-year-old male presented with epigastric pain and indigestion. A significant history of repeated operations for recurrent facial swelling on both sides of face was obtained with histopathologic report showing ALHE. Physical examination revealed a right facial swelling. Laboratory tests were unremarkable with no evidence of hormonal hypersecretion. Ultrasound abdomen showed a well defined mixed echogenic right suprarenal mass (6.4*4.5 cm). Abdominal computed tomography revealed a well defined heterogeneously enhancing right adrenal mass (5*4 cm). Patient underwent right adrenalectomy. Intra-operative findings revealed right adrenal tumor (8*4 cm). **Results:** Histopathologic findings suggested adrenal schwannoma which was confirmed by immunohistochemical study (IHC) showing diffuse expression of S-100. Fine-needle aspiration biopsy of facial lesion confirmed recurrence of ALHE. **Discussion:** Adrenal schwannomas are extremely rare. Uptil now, less than 40 cases have been reported. These usually present as incidentalomas. Surgical resection is the primary management of adrenal schwannomas as it is difficult to distinguish these tumors from other entities, benign or malignant, simply based on imaging. Ancillary techniques like IHC are diagnostic. ALHE is an uncommon condition; believed to be true neoplasm of endothelium containing superficial blood vessels. **Conclusion:** Adrenal schwannoma is a very rare entity and incidentally it was found in a patient of recurrent ALHE. As imaging studies are nonspecific, IHC is required for correctly classifying this tumor.

UMP 02 – 18

Diagnosis and Treatment of BK Virus-Associated Transplant Nephropathy in our center

Mahapatro BK

SCB Medical College & Hospital, Cuttack

The incidence of polyoma virus infection, particularly that of BK virus (BKV) in kidney transplant recipients has been increasing steadily since early 1990s. The diagnosis is generally made by a renal allograft biopsy. However the diagnosis can sometimes be difficult because of the pathological similarities between BKV associated nephropathy (BKVAN) and acute cellular rejection. In addition to the difficulties in making a diagnosis, the treatment of BKVAN can also be very complex. Reduction in immunosuppression is generally advocated as the initial therapeutic option for the management of BKVAN. Despite reduced immunosuppression, BKV can persist in the renal allograft and lead to gradual loss of kidney function. Hence, new therapeutic options are being evaluated for treatment of BKVAN. Cidofovir, an anti-viral agent with known nephrotoxic effects, has been successfully used in very low doses to treat patients with BKVAN, with serial measurement of the blood and urine BKV load with PCR assays. More recently several other agents have also been utilized to treat

BKVAN, with variable success. We are presenting our experience with BKVAN in our center. Out of five cases of BKVAN, one had undergone graft nephrectomy followed by second renal transplantation.

UMP 02 – 19

Dermoid cyst; a mistaken entity as third testis

Naloh Mibang, Bernard Amer, Sinam Rajendra Singh

Regional Institute of Medical Sciences, Imphal

Introduction: Dermoid cysts demonstrate squamous epithelium, eccrine glands, and pilosebaceous units. In addition, it may develop bone, tooth, or nerve tissue on occasion. The incidence of dermoid cyst is unknown, and its rarity may be due to lack of clinical criteria to establish a preoperative diagnosis and the fact that some cases are grouped under mature teratoma. Dermoid cyst of the scrotum should be suspected in a child or adult with a painless testicular mass which has not enlarged for some time. **Method:** Case report: A 45 years/M, presented with complaints of a painless swelling in the scrotum for the past several years. A thorough history and physical examination was done. On inspection it looked like a third testis situated at the bottom of the scrotum. On palpation it was a soft, cystic swelling clearly separated from the testis. Transillumination was negative. Fine needle aspiration cytology (FNAC) of the swelling and a Computerized Tomography (CT) of pelvis and perineum done. FNAC report was consistent with dermoid cyst and the CT report was a cystic swelling of the scrotum with the apex extending towards the perineal body. We excised the lesion under spinal anesthesia and the histopathological report confirmed our diagnosis as a dermoid cyst. **Conclusions:** A painless, slow growing mass in the scrotum may be a benign or a malignant solid testicular tumors. A dermoid cyst of the scrotum although very rare should be included in the differential diagnosis of a mass in the scrotum. **Key words:** Dermoid cyst, Testicular swelling, Testicular malignancy

UMP 02 – 20

Left supraclavicular lymph node metastasis from transitional cell carcinoma of urinary bladder: case report

Narendra JB, Prasad HL, Karthikeyan VS, Sadanand, Nagabhushan M, Kamath AJ

Institute of Nephrourology, Bangalore

Introduction and objective The bladder cancer usually metastasizes to regional pelvic lymph nodes, lungs, liver and bones. Metastasis to non-regional lymph nodes especially cervical lymph nodes is extremely rare presentation. Metastasis to head and neck region is associated with poor prognosis and low survival rate. **Methods** 73 year old male, presents with history painless hematuria with passage of clots since 6 months. Cystoscopy, 2 months back patchy hemorrhagic areas over posterior wall of bladder, treated conservatively. Examination .general condition satisfactory, anaemic, single left supraclavicular lymph node enlargement 1.5 cms firm discrete. Investigated , Bladder growth – well defined 6.4 x 4.8 x 6.5 cm heterogeneously enhancing soft tissue attenuation polypoidal growth arising from the anterior wall of urinary bladder with preaortic, bilateral paraaortic, bilateral internal iliac, right external iliac groups largest measuring 15 x 14.7mm in left common iliac group with significant fat stranding noted in preaortic and paraaortic region, Stage T3N3M0. Results TURBT done suggestive of high grade papillary transitional cell carcinoma with muscle involvement, Pan-endoscopy of the gastrointestinal tract (GIT) and bronchoscopy were normal. Excision Biopsy of the left supraclavicular Lymph node was done, biopsy reported as metastatic deposit. Immunohistochemical staining confirmed (cytokeratin 7 and 20) of metastatic TCC of the urinary bladder .Patient was put on radical course of chemo-radiotherapy, Patient is now on follow up. **Conclusion** Left supraclavicular lymph node metastasis with muscle invasive bladder tumour is considered as incurable metastatic disease as the pathological retrograde tumour cell deposition against the normal drainage of the node (towards the thoracic duct) imply extensive tumour occupation of the retro peritoneum.

UMP 02 – 21

High grade male urethral cancer: a case report

Naveen Anantu, Rahul devraj, Ramachandraiah , VidyasagarS, Ram ReddyC, MurthyPVLN

Nizams Institute of Medical Sciences, Hyderabad

Introduction: Carcinoma of the male urethra is rare and usually presents in the fifth decade of life. Etiologic factors include chronic inflammation due to a history of frequent sexually transmitted diseases, urethritis, and urethral stricture, and there is likely to be a causal role for human papillomavirus 16 in squamous cell carcinoma of the urethra. More than 50% of patients have a history of urethral stricture disease, almost 25% have a history of sexually transmitted disease, and 96% are symptomatic at presentation. The most common presenting symptoms are urethral bleeding, a palpable urethral mass, and obstructive voiding symptoms. We review the tumour's clinical presentation, diagnosis and pathological features. **Case report :** A 52Yr old, previously healthy man presented to Urology OPD C/O poor flow and urethral bleeding since 3 months. Previously there is no H/O urethral stricture disease, STDs. On complete urine examination there are plenty of RBCs. Urine cytology for malignant cells negative. Ultrasound abdomen showing cystitis changes. On Cystourethroscopic examination there is diffuse growth involving bulbar urethra. Biopsy of the growth showing high grade urothelial carcinoma with squamous differentiation. On CECT Abdomen there are no enlarged pelvic nodes. Radical cystoprostatectomy, total penectomy with inferior pubectomy was done. **Discussion :** Tumors of the male urethra are categorized according to location and histologic features of the cells lining the urethra . The bulbomembranous urethra is involved most frequently, accounting for 60% of tumors, followed by the penile urethra (30%) and the prostatic urethra (10%). Overall, 80% of male urethral cancers are squamous cell carcinoma; 15% are transitional cell carcinoma; and 5% are adenocarcinoma, melanoma, lymphoma, paraganglioma, sarcoma, or an undifferentiated tumor. The histologic subtype of urethral cancer also varies by anatomic location. Carcinomas of the prostatic urethra are of transitional cell origin in 90% and of squamous cell origin in 10%; carcinomas of the penile urethra are of squamous cell origin in 90% and of transitional cell origin in 10%; and carcinomas of the bulbomembranous urethra are of squamous cell origin in 80%, of transitional cell origin in 10%, and adenocarcinoma or undifferentiated in 10. Early lesions of the bulbomembranous urethra have been treated successfully by transurethral resection or by segmental excision of the involved urethral segment with an end-to-end anastomosis. Unfortunately, cases appropriate for limited resection are rare. Poor survival figures have been recorded for all forms of treatment, but it appears that radical excision offers the best opportunity for long-term disease control and the lowest incidence of local recurrence. Radical cystoprostatectomy, pelvic lymphadenectomy, and total penectomy are usually required. Extending the operation to include in-continuity resection of the pubic rami and the adjacent urogenital diaphragm may improve the margin of resection and local control. **Conclusion :** Male bulbar urethral carcinoma is a rare tumor with aggressive behavior requiring radical surgery with reconstruction most of the times.

UMP 02 – 22

A rare case of xanthogranulomatous pyelonephritis with out obstruction presenting as renal cell carcinoma

Nipun AC, Nagaraja NH, Keshavmurthy R, Srinivas J, Swati N, Prakash HS, Neeraj G

Institute of nephro urology, Bangalore

Introduction and Objective: Xanthogranulomatous Pyelonephritis (XGP) is a rare entity and constitutes less than 1% of chronic pyelonephritis. XGP is severe and chronic renal inflammatory condition, generally associated with urinary tract infection and obstructing renal calculi, leading to diffuse or focal kidney destruction. **Materials and Methods:** We report a case of 34-year-old woman with the complaints of flank pain, weight loss, and palpable renal mass. On C T scan a diagnosis of renal cell carcinoma with infiltration in to adjacent structures was made. There was no evidence of calculus or obstruction. Radical nephrectomy was planned. Patient underwent the procedure **Results** Histopathological examination of specimen revealed xantho granulomatous pyelonephritis with involvement of spleen and pancreas. **Conclusions** Xanthogranulomatous pyelonephritis is a relatively rare entity that is associated with obstruction (e. g., stones) and infection of the urinary tract. Its rarity and resultant unfamiliarity often delay diagnosis and therapy, which in turn affect the prognosis. Furthermore, this entity can be mistaken for renal tumors. Early diagnosis and prompt treatment play a crucial role in minimizing the morbidity and mortality rates of XGP

UMP 02 – 23**Carcinoma prostate presenting as scalp and forehead skin metastasis: a rare entity****Goyal S, Sen TK, Thanthavalia A**

Sri Satya Sai Institute of Higher Medical Sciences, Puttuparthi

Introduction: skin metastasis due to carcinoma prostate is rare entity. Malignancies of the breast, lung, kidneys, stomach, uterus, and colon are the most common causes for cutaneous metastases. Although carcinoma of the prostate is common but it is very rarely responsible for scalp skin metastases. **Study methods:** 63 yr male presented to plastic surgery OPD with complaints of swelling over forehead, on examination subcutaneous swelling size of 10x9 cm, firm in consistency situated in the front of forehead, underwent excision of swelling and histo-pathological report turned out as adenoid cystic carcinoma. Immunohistochemistry marker including PSA, P504S (AMACR), KI-67 were positive. Then retrospectively serum PSA was sent, that was 100 ng/ml and patient was referred to urology OPD for further management. Patient was denying of lower urinary tract symptoms. on rectal examination hard nodular prostate was found. Patient was advised for prostatic biopsy but meanwhile patient lost follow up and now came with clinical features suggestive of spinal cord compression because of vertebral metastasis. **Results:** repeat PSA also very high (100 ng/ml), transrectal prostatic biopsy s/o adenocarcinoma of prostate, CT head showing large subcutaneous swelling at forehead with indentation of underlying bone, Bone scan was showing multiple bony metastasis in whole body. **Conclusion:** Prostate carcinoma is usually adenocarcinoma and has a high metastatic potential. Cutaneous metastases from prostate carcinoma are usually very rare and asymptomatic and may occur at single or multiple sites. Metastatic lesions are usually papules or nodules, and they rarely ulcerate. The mechanism of skin involvement is not well understood, but suggested routes include embolization of the vessels, via lymphatics, or through perineural lymphatics. Their presence is associated with advanced disease and poor prognosis

UMP 03 – 01**BOO with obstructive uropathy – is bladder drainage enough?****Parikh A, Tuli A, Jaiswal A, Shivanna N, Francis SK, Mammen KJ**

Christian Medical College, Ludhiana

Chronic bladder outlet obstruction leads to detrusor hypertrophy, which causes obstructive uropathy which usually settles with continuous bladder drainage. For obstructive uropathy resulting from scarring and fibrosis of bilateral vesico ureteric junctions, bladder drainage is not sufficient. We report a patient with chronic BOO causing bilateral VUJ obstruction and obstructive uropathy requiring upper tract drainage. Case report 53 year old gentleman admitted with gradually progressive lower urinary tract symptoms since 6 months. He had associated high grade fever with chills. Creatinine was 6.4mg%. Ultrasound abdomen showed bilateral severe hydronephrosis. Patient was catheterized and his creatinine came down to 4.5mg%. In view of persisting bilateral hydronephrosis, bilateral percutaneous nephrostomy was done. Bilateral nephrostogram showed highly tortuous ureters with hold up of contrast at VUJ. Cystoscopy showed high bladder neck, severely trabeculated bladder. Bladder neck incision and bilateral JJ stenting was done with single J ileostomy stents. Gradually his creatinine came down to 2mg%. **Discussion** Bladder outlet obstruction can lead to increased intravesical pressure and detrusor muscle hypertrophy which leads secondary vesicoureteric junction obstruction. Deposition of collagen leads to decreased bladder wall compliance and results in trabeculation. Secondary vesicoureteric junction obstruction due to fibrosis and scarring leads to deterioration of renal function. This requires surgical interventions for upper and lower tracts till nadir level of renal function is achieved. **Conclusion** Upper tract drainage should be considered in chronic BOO with obstructive uropathy if expected creatinine values are not achieved by continuous bladder drainage.

UMP 03 – 02**Pheochromocytoma of the Urinary Bladder - A Rare Case****Patil Avinash B, Prakash Babu SML, Pathade Amey, Sandeep P, Nagaraj HK**

MS Ramaiah Medical College and Hospital Bangalore

INTRODUCTION AND OBJECTIVE Pheochromocytomas of urinary

bladder are rare tumours. They present with non-specific clinical signs and symptoms. **MATERIAL AND METHODS:** A 35 year old female presented with recurrent attacks of headache during micturition. On evaluation she was found to have paroxysmal hypertension and raised urinary metanephrines with well-defined mass at the base of the bladder. The patient was treated surgically by partial cystectomy and lesion was confirmed postoperatively. **CONCLUSION:** Pheochromocytoma of the urinary bladder is a rare tumour. It should always be considered in differential diagnosis of hypervascular lesion of the bladder and in any bladder tumour in the presence of paroxysmal hypertension. Proper preoperative evaluation is mandatory and partial cystectomy is treatment of choice.

UMP 03 – 03**A mystery of a lost and forgotten Copper -T - A case report****Pradeep Kumar Sinha, Shaw M, Sarkar K, Pathak H, Ghosal P, Sarkar KK**

Vivekananda Institute of Medical Sciences, Kolkata

Introduction: Migration of a Copper-T is a known entity and it is commonly seen after uterine perforation either acutely or slowly after erosion of uterine wall. We present a rare case of migrated Copper-T presenting 28 yrs later with calcification of Copper-T in urinary bladder and causing a colovesical fistula. **Materials and methods:** A 50 yrs old lady presented to us with one year history of severe dysuria and suprapubic discomfort. She had H/O Copper -T insertion 28yrs back and failure to retrieve after 6 months when she c/o discomfort due to the IUCD. She had a H/O of successful conception 2 yrs after the insertion. She had a H/O open b/l tube ligation (26 yrs back), abdominal hysterectomy (4 yrs back) open suprapubic cystolithotomy (1 yr back) all operated outside. Her examination was normal except for multiple scar of previous surgery. Her basic lab investigations were normal except for positive urine culture for enterobacter cloacae. We did a CECT KUB which showed a calcified Copper - T in and traversing the wall of the urinary bladder into peritoneal cavity. Patient underwent cystoscopy and dislodging of the calcified Copper -T from the posterior wall of bladder and HO:YAG lithotripsy of the calcification and extraction per urethra. Ureterscopy through the defect seen at the UB wall revealed a communication with bowel. Pt underwent midline laparotomy which showed a connection between the sigmoid colon and the UB wall, which was disconnected and closed primarily in two layers. Pt had an uneventful post operative recovery. **Result:** Pt had a colovesical fistula and bladder calculus due to migrated Copper - T. **Conclusion:** Migrated Copper - T presenting as a bladder calculus is a very rare entity and causing an enterovesical fistula is rarest of the rare entity.

UMP 03 – 04**Isolated renal hydatid cyst with gross hydatiduria; a case report****Prasad PVGS, Rahul D, Ramachandraiah G, Vidyasagar S, Ramireddy C, Murthy PVLN**

Nizams Institute of Medical Sciences, Hyderabad

INTRODUCTION :- Kidney involvement in echinococcosis is extremely rare, constituting only 2-3% of all cases. Primary involvement of the kidney without the involvement of the liver and lungs is even more rare. Hydatiduria accompanies only 10-20% of all cases of renal hydatidosis and is usually microscopic. We present a rare case of primary left renal hydatid having multiple daughter cysts with gross hydatiduria. The diagnosis of primary hydatid cyst of the kidney, in the absence of hydatiduria, is usually radiological as most patients have negative immunological tests. **CASE REPORT:-** A 58-year-old male presented with complaints of intermittent passage of small, white, balloon-like, grape-sized structures in the urine and intermittent colicky left loin pain for the last three months. Abdominal examination did not reveal any palpable lump. Rest of the systemic examination was normal. Gross examination of a single balloon-like structure in the urine revealed a membranous cyst measuring around 2 cm; histopathology showed an outer laminated layer with an inner germinal layer. The laminated structure was consistent with a hydatid cyst. His routine blood investigations were normal with no eosinophilia and normal renal function tests. X-ray chest P-A view was normal. The USG abdomen revealed multiseptate cyst in the left kidney; liver was normal. The CT

scan revealed a cystic lesion in the left kidney. The whole right kidney was almost replaced by the cystic mass. Patient was planned for surgery by flank extraperitoneal approach. Left nephrectomy was done. Patient received four weeks of preoperative albendazole which was continued for eight weeks postoperatively. The resected specimen showed kidney turned into a bag of cysts with multiple daughter cysts. The histopathological examination was consistent with left renal hydatid disease and multiple daughter cysts. **CONCLUSION:-** In general, surgery is the treatment of choice in renal hydatid cyst. Kidney-sparing surgery (removal of hydatid cyst with pericystectomy) is possible in most cases (75%). Nephrectomy (25% of cases) must be reserved for destroyed kidney. Very few cases of laparoscopic removal of renal hydatid are reported. There is fear of cyst rupture and dissemination during dissection, entrapment and removal of the hydatid cyst during laparoscopy. Utmost care should be taken during the surgery to prevent spillage and resultant disseminated hydatidosis. Pre and postoperative one-month courses of Albendazole should be considered in order to sterilize the cyst, decrease the chance of anaphylaxis and decrease the tension in the cyst wall (thus reducing the risk of spillage during surgery) and to reduce the recurrence rate postoperatively. During kidney-sparing surgery scolicidal solutions such as hypertonic saline should be used before opening the cavities to kill the daughter cysts and therefore prevent further spread or anaphylactic reaction.

UMP 03 – 05

A prospective trial in evaluating role of percent free PSA in prostatic pathology

Prasanth Ganesh, Ravichandran, Venugopal Konanki, Ganesh

Meenakshi Mission Hospital, Madurai

INTRODUCTION AND OBJECTIVE The percentage of free prostate-specific antigen (PSA) in serum has been shown to enhance the specificity of PSA testing for prostate cancer detection, but earlier studies provided only preliminary cutoffs for clinical use. To develop risk assessment guidelines and a cutoff value for defining abnormal percentage of free PSA in a population of men to whom the test would be applied. **METHODS:** A total of 100 men, 40-75 years of age with a palpably benign prostate gland, PSA of 4.0-10ng/ml and histologically confirmed diagnosis, all subjects had undergone ultrasound-guided 6-sector needle biopsies of the prostate and, thus, had a histologically confirmed diagnosis prior to determination of free PSA concentrations. Mean values were compared with t-tests (chi-square test, Fischer exact test) for normally distributed parameters and the Mann-Whitney U test for non-normal parameters, and linear regression analysis was used to assess the relationships among percentage of free PSA and PSA. **Results.—** The percentage of free PSA used in 2 ways: as a single cutoff (ie, perform a biopsy for all patients at or below a cutoff of 10% free PSA) or as an individual patient risk assessment. The 10% free PSA cutoff detected 95% of cancers while avoiding 20% of unnecessary biopsies. The cancers associated with greater than 10% free PSA were more prevalent in older patients, and generally were less threatening in terms of tumor grade. For individual patients, a lower percentage of free PSA was associated with a higher risk of cancer (range, 8%-56%). **Conclusions —** Use of the percentage of free PSA can reduce unnecessary biopsies in patients undergoing evaluation for prostate cancer, with a minimal loss in sensitivity in detecting cancer. A cutoff of 10% or less free PSA is recommended for patients with PSA values between 4.0 and 10.0 ng/mL and a palpably benign gland, regardless of patient age or prostate size. **Key words –** PSA-prostate specific antigen, prostate cancer

UMP 03 – 06

Primary malignant melanoma of the female urethra: case report

RP Sanjay, NGirish, R Keshavmurthy, C R Chandershekar, C S Ratkal, G K Venkatesh

Institute of Nephrourology, Bangalore

Introduction and objective: We report a rare case of Primary Malignant Melanoma of the female urethra. Primary Malignant Melanoma of the female urethra, is extremely rare, with approximately 121 cases in indexed literature since 1966; it was described for the first time in 1896 by Reed, most of them being published as case reports. **Methods:** A 70-year-old woman presented with recurrent urinary retention and failed trial voiding. On examination she had inguinal lymphadenopathy and firm to hard

purplish discoloration of meatus, induration in anterior vaginal wall. On urethroscopy, the lesion involved complete urethra and bladder neck. Biopsy revealed malignant melanoma of urethra. Metastatic work up was done with MDCT, the lesion was infiltrating adjacent structures with obturator and inguinal lymphadenopathy. Distant metastasis to lungs and liver detected. **Results:** Primary Malignant Melanoma of urethra T4N2M1 disease, palliative chemo-radiation was advised. The patient refused any invasive surgical approach and has not shown clinical progression of disease to date with irregular follow-up. **Conclusion:** Melanoma of the female urethra is an extremely uncommon pathology leading to paucity of literature and any definite recommendations regarding management. Radical surgery with adjuvant chemotherapy appears to provide some response in an otherwise very poor prognostic scenario.

UMP 03 – 07

Urethral Foreign Body - A Rare Presentation

Rahangdale P P, Pathak H, Lakhe V, Gupta M, Deepak Kumar

Lilavati Hospital and Research Centre, Mumbai

Introduction and objective - Urethral foreign bodies are rare presentations in clinical practice. Most of them are self inserted foreign bodies for autoerotism or iatrogenic broken piece of instrument or catheter during procedure. They may present as emergency where history is lacking & hematuria, retention or dysuria may be the only presentation making their management tricky. Proper endoscopic instruments must be available to remove foreign body safely. **Methods –** This is a descriptive case report of a 78 yr male who presented to emergency department of Lilavati hospital with history of lost catheter he used for urethral dilatation for known stricture urethra. Patient had habit of keeping catheter in urethra while sleeping. Patient could pass urine with dribbling. Clinical examination was inconclusive so patient was investigated further by X Ray KUB and USG. Clinical presentation, evaluation, management, review of the literature are discussed. **Results -** Radiological investigations were done and tubular foreign body was confirmed in urethra reaching upto bladder. Foreign body was removed endoscopically. Post operative recovery was uneventful. Patient was taught safe method of self-dilatation of urethra. **Conclusions –** Patients with foreign body in urethra pose difficult diagnosis if proper history is not given. Moreover only history can lead to diagnosis. Proper clinical examination, a strong suspicion and radiological investigations are must to reach diagnosis. Catheterisation must be avoided to prevent urethral injury and foreign body migration. Endoscopic removal is often successful but open surgery may be required depending on size and shape of foreign body. Follow-up is essential to diagnose complications like stricture.

UMP 03 – 08

Giant hydronephrosis masquerading as ascitis: a case report

Rahul Devraj, Suresh V, Ramachandraiah, Vidyasagar S, Ram Reddy C, Murthy PVLN

Nizams Institute of Medical Sciences, Hyderabad

Introduction Hydronephrosis sometimes presents as an intraabdominal mass with the features of a renal swelling. However, as a result of widespread use of ultrasonography, most cases of hydronephrosis are now diagnosed before the kidney is large enough to produce a visible swelling. Rarely, massive distension of the kidney may occur and create diagnostic confusion. The present report relates to such a case, in an adult male, who had a rapidly progressive giant hydronephrosis clinically simulating ascites. **Case report** A 50 year old male presented with gross distention of abdomen since two months which is slowly progressive and not associated with fever. His complete blood picture and renal parameters are within normal limits. Ultrasound abdomen suggestive of left gross hydronephrosis filling entire abdomen pushing abdominal contents right side. CECT abdomen suggestive of right side normal functioning kidney with left giant hydronephrosis likely because of left pelvi ureteric junction obstruction. We did left simple nephrectomy and drained around 20 litres of clear fluid from left kidney. Postoperative period uneventful. **Discussion** Giant hydronephrosis has been defined as a kidney containing more than 1000 ml of fluid in its collecting system. The radiological diagnostic criteria are a hydronephrotic renal pelvis that meets or crosses the midline, occupies a hemi-abdomen and extends for a length of five vertebrae or more. With higher standards

of medical care giant hydronephrosis is now a rare urological entity, occurring predominantly in children. The commonest cause is congenital PUJ obstruction which occurs in 80% of cases. Other causes include flap-like mucosal folds, polar or aberrant vessels, ureteric kinks and high pelvic insertions of the ureter. Giant hydronephrosis is a slowly progressive disease, and a huge abdominal mass or distended abdomen may be the only sign. Treatment depends on anatomical configuration and functional status of renal units. In very poorly functioning unit with gross infection, nephrectomy is the procedure of choice. Other treatment options in a functional kidney are percutaneous nephrostomy, reduction pyeloplasty with nephropexy calycoarterostomy.

UMP 03 – 09

Primary Rhabdomyosarcoma of the Adrenal in Adults

Rajpal Singh Lamba, Nitin Joshi, Sanish Shringarpure, Piyush Singhaniya, Nandan Pujari, Joseph S, Nandkishore Raut

MGM Medical College, Navi Mumbai

Rhabdomyosarcoma (RMS) is a very uncommon neoplasm in the adult population- and that to RMS of the adrenal glands are very rare. [1] After extensive review of literature only one case of adult primary rhabdomyosarcoma (RMS) of adrenal has been reported till date.[2] This is a case report of 60 year old female patient presented with right flank pain diagnosed to have a non functioning right adrenal mass with tumor thrombus in Inferior vena cava (IVC) extending in both renal veins. She underwent right radical adrenalectomy with radical nephrectomy. The histological and immuno-histochemical study reported primary rhabdomyosarcoma (RMS) of adrenal. Key-words: Rhabdomyosarcoma (RMS), adrenal, adult

UMP 03 – 10

Relevance of prostate biopsy in patients with raised serum prostate- specific antigen with consideration to prostatic inflammation

Rajwardhan Singh, Santosh K Singh, Devendra S Pawar

Pt BD Sharma PGIMS Rohtak

Purpose : We aimed at reducing unnecessary prostatic biopsy in patients with raised serum prostate-specific antigen (PSA) in the gray zone of 4-10 ng/ml by excluding prostatic inflammation. Materials and Methods : The present study was carried among 50 patients with a serum PSA level of over 4 ng/mL to under 10 ng/ml. All patients underwent expressed prostatic secretion (EPS) or voided bladder urine 3 (VB3) test and were classified into two groups. Group A had positive findings on the EPS or VB3 test and the group B had negative findings. Group A patients were treated with ciprofloxacin 500 mg bid for 2 months. If the PSA level was still found to be higher than 4 ng/ml after 2 months, the patients underwent prostate biopsy. In the other cases, the patients were avoided from undergoing prostate biopsy. The patients with a negative EPS or VB3 test immediately underwent prostate biopsy. Results : Of the 50 patients studied, 26 patients (52%) had positive findings on EPS or VB3 test. Of the 26 patients, 23 patients (88.4%) reported decrease in serum PSA level and 16 patients (61.5%) avoided prostate biopsy because their serum PSA level had decreased to less than 4 ng/ml. The total prostate cancer detection rate was 12% in our subjects, whereas it was 20.8% in the patients with negative findings on EPS or VB3 test and 3.8% in those with positive findings, respectively. Conclusion : Many unnecessary prostate biopsies can be avoided in patients with serum PSA values in the gray-zone of 4-10 ng/ml by simply excluding prostatitis and by carrying out a serial diagnostic procedure.

UMP 03 – 11

Effects of hydrochlorothiazide on kidney stone therapy with extracorporeal shock wave lithotripsy

Ramakrishnan P K, Manikandan M, Shanmughadas KV, Madhavan N, Rajeevan AT, Dineshan KM, Venugopalan AV, Felix Cardoza

Govt Medical College Calicut

Objective: The aim of this investigation was to assess the efficacy of hydrochlorothiazide as a hypocalciuric diuretic on stone-free rate of renal

pelvic calculi after extracorporeal shock wave lithotripsy (ESWL). Materials and Methods: A double-blind, placebo-controlled randomized clinical trial was conducted and 52 patients with renal pelvic calculi (diameter \leq 2 cm) were enrolled from december 2013 to july 2014. ESWL protocol was performed by 2,500 shocks per session. The patients were randomized into two groups: (1) 26 patients who were given 25 mg hydrochlorothiazide daily; and (2) 26 patients who received placebo. The stone-free rate was defined as residual calculus size \leq 4 mm in controlled ultrasound on 2nd week, 1 month and 3 months after ESWL. Results: 19 (78%) of the first group and 9 (42.9%) of the second group were stone-free after one session of ESWL (P = 0.02). 88% of the group 1 and 47.8% of the group 2 were stone-free on 1 month after ESWL (P = 0.003); however, this effect of hydrochlorothiazide was not related to the patients' body mass index, age and gender. The accessory treatment procedures were applied in 24% of the group 1 compared with 19% of the group 2 during 3 months (P = 0.68). All patients in both groups were stone-free on 3 months following lithotripsy. Conclusions: Administering 25 mg of hydrochlorothiazide daily adjunct to ESWL of nephrolithiasis improves the stone-free rate at 1 month following a single session of ESWL than ESWL alone. Moreover, it decreases the risk of requiring further ESWL sessions

UMP 03 – 12

Renal Tuberculosis: A rare Presentation.

RameshC, KNatarajan, ChandruT

Sri Ramachandra Medical College, Porur, Chennai

Tuberculosis remains a serious public health issue worldwide. Even in the era of effective chemotherapy, TB still accounts for a substantial number of deaths annually. Early diagnosis is challenging, even in areas with abundant medical resources. 25 yr female came to us with complaints of vague abdominal pain and occasional episodes of burning micturition. USG Abd & CT KUB done showing calcifications in lower pole of left kidney. DMSA shows non functioning lower pole of Lt idney, Urine AFB +VE. Hence Planned for Left partial nephrectomy.

UMP 03 – 13

Biliary peritonitis due to gall bladder perforation after percutaneous nephrolithotomy

Rana Pratap Singh, Nikhil Ranjan, R Tiwary, M Singh, Vijoy Kumar, Rohit Upadhyay

IGIMS Patna

A nineteen old male patient underwent right PNL for right renal 1.5*1.5 cm lower pole stone. The procedure was completed uneventfully with complete stone clearance. The patient developed peritonitis and shock forty eight hours after the procedure. X ray abdomen did not reveal any free air in abdomen while ultrasound revealed free fluid in abdomen. Exploratory laparotomy revealed large amount of bile in abdomen along with three small perforation in gall bladder and one perforation in caudate lobe of liver. Retrograde cholecystectomy was performed but patient did not recover and expired post operatively. This case exemplifies the high mortality of gall bladder perforation after PNL and the lack of early clinical signs.

UMP 03 – 14

Unusual cause of delayed graft function - after cadaver transplant

Rana YP Singh, Pradhan Aditya

BLK Super Speciality Hospital, New Delhi

Introduction : Delayed graft function (DGF) is the term used to describe the failure of the transplanted kidney to function immediately after transplantation due to ischemia-reperfusion and immunological injury. DGF varies from 4 to 10% in living donor and 5 to 50% in deceased donor kidney transplants. Various vascular, Urological and immunological causes are responsible for it which merits timely detection and correction so as to prevent graft failure. Material & Methods : 61 yrs female, blood gp A + diagnosed 2 years prior as ESRD with native urine out put 200-300 ml, was under consideration for renal transplant. She underwent deceased donor kidney transplant on 13/3/2014. Renal artery and Renal vein anastomosed with external iliac artery and External iliac vein end to

side. Cold ischemia time was 15 hrs. Immunosuppression was induction with ATG and maintenance with prednisolone and mycophenolate. First Post operative day urine output was 570 ml and second day 750 ml, thereafter it was 150 ml to 300 ml per day for next 2wks. She required hemodialysis also and urine out was not picked up. Doppler demonstrated well perfused graft and RI with in normal range. Biopsy done twice was not showing rejection. On 17 th day Doppler picked up High velocity in external iliac artery at preanastomotic level. Interventional Angiography confirmed Preanastomotic stenosis and balloon angioplasty done. Results : The following day urine output picked up and next day creatinine started dropping and after 1 wk creatinine reached to 1.5 mg% . Patient has stable graft function at present. Conclusion : - Awareness of the problem, high clinical suspicion, and liberal use of Doppler post transplant may help detecting virtually all hemodynamically significant stenoses. Whereas cases promptly recognized and treated before development of irreversible structural changes of the graft may achieve full recovery of kidney perfusion and function with minimal risks.

UMP 03 – 15

Management of prune belly syndrome

Rathish VR, Ramesh Babu, Venkatramanan, Sunil Shroff

Sri Ramachandra Medical College, Porur, Chennai

Prune belly syndrome is a rare anomaly with an incidence of 1 in 85000 and its management is controversial. Aim: To report a case of Prune Belly Syndrome and discuss its management. Methods: A 2-yr-old boy was admitted with recurrent UTI. The child was thriving well and there were no other systemic abnormalities. Clinical examination revealed typical 'prune belly' with lax abdominal musculature and fascia. Both testes were undescended and not palpable. Ultrasonogram revealed bilateral gross hydroureteronephrosis. MCU revealed 'hour glass' shaped bladder due to urachal diverticulum and dilated posterior urethra. CT scan revealed bilateral intra abdominal testis with gross hydro ureters. Results: At cystoscopy type IV PUV was found and was fulgurated at 12 O'clock. Elliptical incision excising lax soft tissue and skin; preserving umbilicus was made to facilitate Monfort abdominoplasty. Bladder was exposed, urachal diverticulum was excised, bilateral tortuous hydro ureters were reduced in length and width, reimplanted into bladder. Bilateral intra abdominal testes were mobilized and bilateral subdartos pouch orchidopexy and circumcision was performed. Rectus fascia doublebreasting and Monfort abdominoplasty was completed. Discussion: Prune Belly Syndrome is a rare anomaly and the initial management is conservative. In select cases, intervention is required. We report a comprehensive management of this rare anomaly

UMP 03 – 16

A rare case report of priapism in a patient suffering from sickle cell trait

Rohit Singhal, Ajit Sawant, Vijay Kulkarni, Vikash Kumar, Prakash Pawar, Kunal Aterkar, Prashant Patil

LTMGH & LTMMC, Sion, Mumbai

Introduction: - Sickle cell trait occurs in approximately 300 million people worldwide, with the highest prevalence of approximately 30% to 40% in sub-Saharan Africa. Sickle cell trait occasionally can be associated with significant morbidity and mortality. It is associated with hematuria, renal papillary necrosis, splenic infarction, exertional rhabdomyolysis, and sudden death following exercise. There is less literature to suggest an independent association with priapism. It is important that physicians be aware of this risk. Materials & methods: - A 25- year- old- male presented to the emergency room with a painful prolonged erection lasting for more than 8 hours following sexual intercourse. He was attempted with intracavernosal phenylephrine without any success in some other hospital. He was not on any oral medication. He had no known family history of sickle cell disease or trait. He was hemodynamically stable. Physical examination revealed priapism. Laboratory data revealed a positive sickle solubility test. Hemoglobin electrophoresis revealed sickle cell trait. The patient underwent El-Ghorab procedure and achieved complete resolution of the priapism. Conclusion: After the surgery patient is doing well. Till date many cases have been reported of priapism due to sickle cell disease but it has been reported rarely in sickle cell trait. So teaching about sickle cell trait should include the risk of priapism.

UMP 03 – 17

A Left Retrocaval Ureter - A Case Report

S Brahadeeswaran, Vasudevan T, Prasant Nayak, Joseph Philip Raj, MossadeqA

Mahatma Gandhi Medical College, Pondicherry

INTRODUCTION : Retrocaval ureter is a rare developmental anomaly of the IVC which occurs in 1 in 1000 livebirths. Most of the cases remain asymptomatic whereas very few cases presented with signs of ureteral obstruction. In this case report, we present you a transposition of great vessels with a retrocaval ureter on the left side without situs inversus which is even more rare presentation. MATERIALS AND METHODS: A 88 year old man presented with a history of occasional left loin pain for 6 months associated with dysuria. On examination, he had mild left loin tenderness and grade II prostatomegaly on DRE. USG abdomen showed a left PCS dilatation with dilatation of left proximal ureter, CMD was maintained. CT IVU was done suggestive of transposition of aorta and IVC, ureter was draining which showed a classical 'seahorse' deformity suggestive of Retrocaval ureter on left side. RESULTS: Patient was successfully treated conservatively considering his age and post operative morbidities. CONCLUSION: The reason for presenting this case report is due to its rare presentation of great vessels transposition with a retrocaval ureter on left side and to create awareness among young urologists.

UMP 03 – 18

Retroperitoneal Fibrosis

S Suresh Bhalaji

Madras Medical College

Introduction. Retro peritoneal fibrosis is a rare cause of acute renal failure (ARF) with only a handful of cases reported in literature. We report a case of a 48 year-old female with an incidental finding of retro peritoneal fibrosis. Case Presentation. Patient is a 48-year-old female with no significant past medical history who presented with a four-month history of low back pain and associated nausea with vomiting. Physical examination was significant for elevated blood pressure at 170/100 mm hg and bilateral pedal edema. Significant admission laboratory include blood urea nitrogen (BUN) of 78 mg/dL, serum creatinine (Cr) of 18 mg/dL, bicarbonate of 19 mg/dL, and potassium of 6.2 mm L/L. Renal ultrasound showed bilateral hydronephrosis. Post-void residual urine volume was normal. Abdominopelvic CT scan showed retro peritoneal fibrosis. She was treated with a combination of bilateral ureteral stent placement, hemodialysis, and steroid therapy and tamoxifen. There was no improvement in biochemical values and symptoms. PT was taken up for laparotomy bilateral ureterolysis and omental wrapping. 2 months after hospital discharge, her BUN and Cr levels improved to 18 mg/dL and 1.25 mg/dL, respectively. Conclusion. Retro peritoneal fibrosis should be considered as a differential diagnosis in patients with acute renal failure and obstructive uropathy. Abdominal CT scan is the examination of choice for diagnosis. Full resolution with treatment depends on the duration of obstruction

UMP 03 – 19

Spontaneous bladder perforation in a case of prostatomegaly- a case report

Saha Barun, Sharma PK, Mandal SN, Karmakar D

Calcutta National Medical College, Kolkata

INTRODUCTION & OBJECTIVE: Spontaneous bladder perforation is a rare event. Patient usually present with features of peritonitis & diagnosis usually made at operation. The morbidity & mortality is high in this group. (b)METHODS: A 60 years male patient admitted for TURP, with per urethral catheter in situ. Patient having lower abdominal fullness which does not subside with bladder wash. Over the next couple of days he developed progressive lower abdominal distension & features suggestive of intestinal obstruction. USG whole abdomen performed & showed pelvic collection & interloop pus collection at lower abdomen. An exploratory laparotomy revealed the dome & anterior bladder wall completely sloughed out. Repair of bladder with peritoneal lavage given. Abdominal drain, SPC, PUC inserted. (c)RESULTS: From the second post operative day patient started draining urine from abdominal drain & laparotomy wound. But it

decreases gradually & urine starts coming out from suprapubic cystostomy & perurethral catheter. But patient's general condition did not improve, patient developed burst abdomen which was being managed with regular dressing. He died on 30th post operative day. (d)CONCLUSION: Patient with urinary bladder rupture usually present with peritonitis. Common causes are usually bladder cancer, prior radiotherapy, neurogenic bladder or outflow obstruction. A high index of suspicion is required in presence of urinary sign & symptom suggestive of bladder cancer. It is a differential diagnosis of acute abdomen. It carries a high mortality rate exceeding 50-75%.

UMP 03 – 20

Extensive Idiopathic Retroperitoneal fibrosis in a child

Sankar G, Surya Prakash V, Vijay Kumar, Venu M, Amit Kumar, Vijayabhaskar, Srikanth D

Narayana Medical College, Nellore

Introduction:- Retroperitoneal fibrosis in children is extremely rare. Here we present one such case. **Case report :-** A 12-year-old male child had fever, bilateral flank pain. On examination he was febrile, abdomen was soft and bilateral inguinal lymphnodes were palpable. Serum creatinine level was high (2.1 mg/dl) MRI of the abdomen showed diffuse retroperitoneal mass lesion causing compression of IVC and bilateral ureters and periportal cuffing. Contrast enhanced computerized tomography of the abdomen and pelvis revealed a non enhancing soft tissue mass, extending from D12 to Lower end of Sacrum encasing the abdominal aorta, IVC, bilateral renal vein, proximal ureters and rectum and bilateral gross hydronephrosis. Periportal and perihepatic fibrosis seen. CT guided biopsy of the lesion showed features suggestive of retroperitoneal fibrosis with no evidence of malignancy. Retrograde pyelogram showed medial deviation of both ureters suggestive of RPF. Bilateral Double-J stents were placed, following which serum creatinine level declined. He was treated with Prednisone and Tamoxifen, and followup imaging at 1 month showed decrease in the soft tissue mass encasing the abdominal aorta and resolution of the ureteral obstruction. **Discussion :-** Retroperitoneal fibrosis is an uncommon fibrotic process involving the retroperitoneum. RPF most commonly affects patients who are 40 to 60 years of age. Only 30 cases of RPF have been reported in patients younger than 18 years of age. Evaluation for other causes of retroperitoneal lymphadenopathy proved negative. **Conclusion :-** Idiopathic retroperitoneal fibrosis is a rare cause of obstructive uropathy in children. Medical management is effective

UMP 03 – 21

Neuroendocrine tumour of the kidney – a rare entity

Saravanan J, Leelakrishna P, Pitchaibalashanmugam K, Muthulatha N, Thiyagarajan K

Government Kilpauk Medical College & Hospital, Chennai

Renal Neuroendocrine tumors (NETs) are very rare. Although the first case of renal carcinoid tumor was reported 40 years ago, so far there are less than 100 cases reported. The clinical behavior of renal NETs remains undetermined due to the rarity of these lesions although it has been shown that these tumors are rarely associated with neuroendocrine symptoms. Renal NETs can have a varying degree of NE differentiation [carcinoid, atypical carcinoid, small cell carcinoma (SCC), and large cell neuroendocrine carcinoma (LCNEC)] like their counterparts in other anatomical sites. We report a case of a 35 yrs male admitted with symptoms of Left loin pain and dyspepsia. Investigations revealed a 3 cms rounded isodense lesion in midpole of left kidney which on contrast was relatively hypodense. There was no evidence of local or distant metastasis. The patient underwent Left Radical nephrectomy and is on regular follow up. Post op Histology was suggestive of Neuroendocrine tumor. This case is presented for its rarity.

UMP 03 – 22

Isolated ureteral injury caused by blunt trauma.

Saurabh Joshi, Gururaj P, Kumar Rajesh Ranjan, M Soni, Ravishankar THS, Shivshankarappa M, Imadad Ali N

Vijayanagar Institute of Medical science, Bellary

OBJECTIVES: Ureteral injury is rare after blunt trauma. Herein is presented this unusual scenario of ureteral trauma in addition to the pathophysiology of this injury. **METHODS:** A 43-year-old male sustained a rupture of

the left ureter after fall from height. No other injuries or fractures were identified, pt presented late with infected urinoma formation with sepsis & hypotension. **RESULTS:** Left percutaneous 16 fr drain placed under usg guidance, Ureteral injury was diagnosed with Intravenous urography and left DJ stenting done. Again Intravenous urography performed 8 weeks after stenting revealed normal ureteral healing without stricture formation & Percutaneous drain removed. **CONCLUSIONS:** To our knowledge, the isolated avulsion of the ureter in this location has not been reported previously, but must be considered in those patients with severe blunt trauma and hyperextension injuries.

UMP 04 – 01

Primary primitive neuro-ectodermal tumor (PNET) of seminal vesicle: A rare entity

Saurabh Patil, MAK Siddiqui, Gaurang Shah, M Sane, Ashish Gupta

GGMC & JJ Hospital, Byculla, Mumbai

Background: Amongst the urological malignancies, primary seminal tumors are very uncommon, and more so are the PNET's. There are very few reported cases (only 4 publications cited) in the published literature. We hereby present a case of an adolescent male presenting to us with a seminal vesicle mass and his subsequent management thereof. **Discussion:** A 15 year old boy presented with complaints of long-standing, left lower abdominal pain. Clinical examination and routine laboratory parameters were unremarkable. Ultrasound abdomen showed left sided grade III hydronephrosis without an obvious pathology. CT-IVP showed an ill-defined pre-sacral mass, measuring 3.9 x 2.8 x 2.8cm, without gross involvement of other abdominal organs or lymph nodes. To further elucidate the diagnosis, a TRUS was performed which revealed a seminal vesicle mass with dilated vas deferens. With due consideration to the diagnostic and therapeutic possibilities, the patient underwent excision of the tumor mass with left ureteric re-implantation. Histopathology of the same was reported as a malignant desmoplastic round cell tumor of the seminal vesicle infiltrating the corresponding ureter peripherally at adventitia. The patient was further subjected to adjuvant chemoradiation to which he showed a good response. **Conclusion:** The rarity of a seminal vesicle primary malignancy has precluded any standard classifications or management protocols. The approach to each case must be individualized. To the best of our knowledge, this rare case of a seminal vesicle malignancy is one amongst the handful of such reports of primary PNET's seen in urological practice.

UMP 04 – 02

An Interesting Case of Vesical Gossypiboma Mimicking Calculus

Selvakumar S, Ayesha Saheen B, Thiruvavur PV, Periasamy P, Deepak M, Pitchaibalashanmugam K, Govindarajan P

Government Stanley Medical College, Chennai

Introduction and Objective Gossypiboma is an iatrogenic mass lesion resulting from retention of a surgical sponge. Occurs 1 in 1000-1500 intra-abdominal operations. Most common retained foreign body is laparotomy sponge & gauzes. The reports of this technical oversight are the tip of an iceberg due to medicolegal implications. **Methods** 32 years old female presented with history of dysuria, frequency, urgency, intermittency & suprapubic pain for the past 10 months. Patient gives history of trans abdominal hysterectomy for DUB - one year back. On reviewing her operative notes there was a dense bladder adhesion to the uterine wall & during mobilisation bladder was injured and repaired in two layers. Now on per abdominal examination there was a healthy Pfannenstiel scar with suprapubic tenderness. Her USG KUB revealed 4x3 cm mobile vesical calculus. Results Diagnostic cystoscopy with Vesicolitholapaxy was planned. Cystoscopy revealed single mobile vesical calculus (4x3 cm) with normal bladder mucosa. On proceeding with Vesicolitholapaxy, gauze was identified in the core of the calculus. As the gauze was found to be entangled with the calculi - open vesicolithotomy was done. Postop period was uneventful. **Conclusions** Gossypiboma can be prevented & it should be taken into consideration as a differential diagnosis in patients with persistent symptoms and intravesical calcification following previous open pelvic surgeries (urologic & gynecological).

UMP 04 – 03

Solitary neurofibroma of seminal vesicle - a rare entity

Shanmugasundaram Rajaian, Ashwin Shekar Paulraj

MIOT Hospitals, Chennai

Introduction & Objective: Neurofibroma arising from genitourinary tract is a rare entity. It has been reported in kidney, prostate, urinary bladder, penis, spermatic cord and scrotum. We report the first rare case of neurofibroma arising from the seminal vesicle presented with LUTS. **Material and Methods:** Retrospective review of medical records, operative details and review of literature was done. **Results:** A 53 years male presented with voiding LUTS of one year duration. Rectal examination revealed an ill-defined swelling in the left side of pelvis in continuity with prostate. No clinical stigmata of von Recklinghausen's disease were noted. Ultrasound revealed a retrovesical swelling with solid and cystic areas. Computerised Tomography (CT) and Magnetic Resonance Imaging (MRI) revealed the lesion arising from left seminal vesicle. Laparoscopic seminal vesiculectomy was done. Gross examination showed well encapsulated fleshy tan coloured tumour replacing the seminal vesicle. Microscopically the neoplasm was composed of elongated spindle shaped cells along with abundant mucin, collagen bundles and thin walled blood vessels. Immunohistochemical staining revealed that the tumour cells positive for S100, Vimentin and negative for CD34. No evidence of mitosis was noted. His post-operative period was uneventful and he voided well after catheter removal. **Conclusions:** Neurofibromas are benign tumours arising from peripheral nerve sheath. Visceral neurofibromas of genitourinary tract is extremely rare. We report a rare case of neurofibroma arising from seminal vesicle presented as obstruction. It need to be considered as a differential diagnosis for seminal vesicular lesions.

UMP 04 – 04

Xanthogranulomatous cystitis with malacoplakia leading to spontaneous intraperitoneal perforation of urinary bladder in a nine year old girl

Sharma Kuldeep, Singh V, Sinha R J, Sharma P, Garg Y, Singh M, Sankhwar SN

King George's Medical University, Lucknow

Introduction and Objective- Spontaneous bladder perforation is a rare entity. Spontaneous bladder rupture has an insidious presentation, and often results in delayed diagnosis and management because of vague signs and symptoms. **Methods-** A nine year old girl presented with sudden onset, continuous pain abdomen, oliguria and constipation for two days. Micturating cystourethrography and ultrasound abdomen revealed intra peritoneal leakage of contrast. Cystoscopy showed two perforations at the dome of bladder. Open surgical repair of these perforations was done and biopsy was taken from their edges. **Results-** Histopathological examination of biopsied material revealed accumulation of histiocytes with granular eosinophilic cytoplasm and foamy macrophages in the lamina propria with few histiocytes showing intracytoplasmic basophilic inclusions which was suggestive of Xanthogranulomatous cystitis with malacoplakia. Patient is doing well at eleven months of follow up. **Conclusion-** This report described a rarest of the rare case of spontaneous bladder perforation in a young girl due to malacoplakia and Xanthogranulomatous cystitis.

UMP 04 – 05

Clinical study of incidental prostate cancer in transurethral resection of the prostate specimens in the modern PSA era

Shashank M S, Shanmugasadas KV, Madhavan N, Rajeevan A T, Dineshan K M, Venugopal A V, Felix Cardoza

Government Medical College, Kozhikode

Introduction & Objective - To identify rates of incidentally detected prostate cancer in patients undergoing transurethral resection for benign prostatic hyperplasia (BPH). **Methods** - A retrospective review was performed on all transurethral resections of the prostate (TURP) regardless of technique from 2011 to 2013 at a tertiary care institution. 855 men (ages 43–91) were identified by pathology specimen. Those with a known diagnosis of prostate cancer prior to TURP were excluded [n=15] from the

analysis. Results 840 patients had benign pathology; five (0.59%) patients were found to have prostate cancer. Grade of disease ranged from Gleason 2 + 2 = 4 to 3 + 4 = 7. Three patients had cT1a disease and two had cT1b disease. 3 patients were managed by active surveillance with no further events, and two patients underwent radical prostatectomy. **Conclusions-** Our series demonstrates that 0.59 % of patients were found to have prostate cancer, of these 0.23% required treatment. Our study supports both a decreased overall prevalence of incidental prostate cancer and more specifically pT1b lesions in the modern era. It also supports the use of technologies that do not provide tissue for pathologic examination at the time of BPH surgical management Given the low incidental prostate cancer detection rate, the value of pathologic review of TURP specimens may be limited in the PSA era depending on the patient population

UMP 04 – 06

Retrocaval Ureter with ectopic seminal vesicle opening- A rare case report

Shrikanth Atluri, Abhijit Dhale, Umesh Oza, SW Thatte

Bombay Hospital Mumbai

44 year old male presented with right flank pain since 6 month with history of primary infertility. Examination was normal. Blood investigation was normal. Urine showed presence of spermatozoa. Usg was suggestive of right hydronephrosis with hydroureter. CT IVP was suggestive of right retrocaval ureter with right ureter opening in seminal vesicle. Cystoscopy suggestive of normal ureteric orifice and RGP showed right seminal vesicle opening in right ureter. Right retrocaval ureter division with end to end anastomosis was done and patient was relieved of symptoms.

UMP 04 – 07

Keystone flap for staged urethroplasty: reconstruction in a complex case of panurethral stricture disease

Sidhartha Kalra, Dorairajan LN, Dinesh Kumar S, Muruganandham K, Manikandan R, Kumar Santosh

JIPMER Pondicherry

INTRODUCTION AND OBJECTIVE Panurethral strictures are a surgical challenge in situations where local tissue for reconstruction is deficient. Keystone flaps have been used as a simple and effective method of wound closure in other areas of body that would otherwise have required complex flap closure and skin grafting. We describe, for the first time, a case of inflammatory panurethral stricture with extensive local skin deficit successfully managed by a staged perineal urethrostomy with the help of Keystone design perforator island flaps (KDPIF). **METHODS:** A 65 year old gentleman with inflammatory panurethral stricture had complete loss of the penile, scrotal and some part of perineal skin following Fournier gangrene and these areas were replaced by adherent grafted skin not adequate for reconstruction. He was planned for a staged urethroplasty and subsequently underwent perineal urethrostomy with the help of an inverted U perineal skin flap and bilateral KDPIF. The flap consists of two conjoint V-Y island flaps with closure of 'V' as a 'Y' thus creating tissue laxity in the center of the flap at right angles to the 'Y'. The flap is mobilized over fascia and sutured into the original defect and the donor area closed using standard technique. **RESULTS AND CONCLUSION:** Keystone flaps are a simple and effective method of staged urethroplasty where there is scarcity of local scrotal and penile skin for reconstruction. The KDPIF technique has an added advantage of not requiring extensive pre and intraoperative flap planning that is essential in a case of pedicled or free flap.

UMP 04 – 08

Relevance of prostate biopsy in patients with raised serum prostate- specific antigen with consideration to prostatic inflammation

Singh Santosh Kumar, Griwan MS, Dangi A, Pawar DS, Kumar Mandeep, Singh Rajwardhan, Kumar Ashok

Pt BDS University of Health Sciences, Rohtak

Purpose : We aimed at reducing unnecessary prostatic biopsy in patients with raised serum prostate-specific antigen (PSA) in the gray zone of

4-10 ng/ml by excluding prostatic inflammation. **Materials and Methods :** The present study was carried among 50 patients with a serum PSA level of over 4 ng/mL to under 10 ng/ml. All patients underwent expressed prostatic secretion (EPS) or voided bladder urine 3 (VB3) test and were classified into two groups. Group A had positive findings on the EPS or VB3 test and the group B had negative findings. Group A patients were treated with ciprofloxacin 500 mg bid for 2 months. If the PSA level was still found to be higher than 4 ng/ml after 2 months, the patients underwent prostate biopsy. In the other cases, the patients were avoided from undergoing prostate biopsy. The patients with a negative EPS or VB3 test immediately underwent prostate biopsy. **Results :** Of the 50 patients studied, 26 patients (52%) had positive findings on EPS or VB3 test. Of the 26 patients, 23 patients (88.4%) reported decrease in serum PSA level and 16 patients (61.5%) avoided prostate biopsy because their serum PSA level had decreased to less than 4 ng/ml. The total prostate cancer detection rate was 12% in our subjects, whereas it was 20.8% in the patients with negative findings on EPS or VB3 test and 3.8% in those with positive findings, respectively. **Conclusion :** Many unnecessary prostate biopsies can be avoided in patients with serum PSA values in the gray-zone of 4-10 ng/ml by simply excluding prostatitis and by carrying out a serial diagnostic procedure.

UMP 04 – 09

Endoscopic management of missed bullet in urinary bladder- A case report

Singh Siddharth, Sankhwar SN, Singh V, Kumar M, Goel A, Singh M, Kanodia Gautam

KG MU Lucknow

INTRODUCTION - Foreign body in the urinary tract is uncommon, urinary bladder being the most common site. Gunshot injuries to the urinary tract are uncommon and are usually associated with an injury to adjacent organs. Usually the foreign body in urinary tract if not removed acts as a nidus for recurrent infections, and may cause pelvic pain, dysuria, hematuria, retention and secondary stones. Depending upon the size and type of the foreign body either endoscopic management or open surgical exploration may be needed. We share our experience of endoscopic management of missed bullet in urinary bladder. **MATERIAL -** A 27-year-old male had history of voiding LUTS from last 5 years. He had history of firearm injury 6 years back for which he underwent exploratory laparotomy elsewhere. Intra operatively bullet could not be traced out and retrieved. Radiological investigations and cystoscopy revealed bullet (2x1cm) in urinary bladder. Percutaneous cystolithotomy (PCCL) was done and bullet was retrieved intact. **CONCLUSION-Management** of foreign body in the urinary bladder is aimed at complete extraction depending on the nature of the foreign body with minimal trauma to the bladder and urethra. Most of the foreign bodies in the urinary bladder can be successfully removed endoscopically by percutaneous cystolithotomy (PCCL) with minimal morbidity of patients.

UMP 04 – 10

An unusual bladder repair

Sisodia Vipin K, Ganesh Prasad, Venugopal Konnaki, Ravi Chadran R

Meenakshi Mission Hospital & Research centre, Madurai

Urinary bladder and ureters are the most frequently injured organs during pelvic surgery most often in Obstetrics and gynecological procedures. Intra operatively 51.6 % of bladder injuries and 11.5 % of ureteric injuries are identified intra operatively. A 48 year old female was referred to us after undergoing hysterectomy outside for fibroid uterus and with a note mentioning about urinary bladder injury that was difficult to repair so abdominal drains were kept and primary closure done. She was complaining of pain at the operated site, h/o LSCS 15 years back. She was vitally stable with mild tenderness over the operative site with FC and drain in situ that were draining hemorrhagic fluid. Patient was admitted, all blood parameters were normal. CT done showing no drainage from left kidney, contrast extravasation from the right ureter into the pelvic cavity. Cystoscopy done but nothing conclusive could be made out. Abdominal exploration was done through lower midline vertical incision. To our great disbelief only bladder neck and minimal trigonal area on the right side was present, rest of the bladder was absent. Left ureter was tied and right was freely draining

into the pelvic cavity. Due to severe bowel edema and in consultation with patient's relatives, decision was taken to go with urinary diversion in the form of Ileal conduit. Post operative course was uneventful and she was discharged on POD 10. This was a very rare instance in which for iatrogenic bladder injury Ileal conduit was done.

UMP 04 – 11

Nephron sparing surgery in a case of chronic kidney disease with a small renal mass

Subha Kanesh SK, Aysha ShaheenB, ThiruvurulPV, PeriasamyP, DeepakM, PitchaibalashanmugamK, GovindarajanP

Stanley Medical College, Chennai

INTRODUCTION & OBJECTIVE Small renal mass (SRM) refers to contrast enhancing renal lesion measuring less than 4 cm which corresponds to AJCC clinical staging of T1a. Incidence increasing due to imaging studies. **METHODS** 59 year old male admitted with history of right loin pain for past 2 months. His clinical examination was normal. Renal function tests revealed creatinine 3.4 mg/dl. USG, CT & MRI showed B/L contracted kidney with a mass of 3.5 x 2.2 cm in mid pole of right kidney near the hilum. **RESULTS** Partial nephrectomy was planned. On entering the retroperitoneum a tumor of size 3*2 cm was occupying the mid pole of the right kidney abutting the renal vessels near the hilum. loops applied vessels not clamped. The tumor was marked with diathermy circumferentially with a margin of around 5 mm. During excision, bleeding points were controlled by digital compression of the adjacent renal parenchyma. Methylene blue was injected and rents in the collecting system was closed with 4-0 vicryl. Tumor bed was closed with 3-0 vicryl over a pledget of gel foam and tightened with hemolok clips. Tumor free margins confirmed by histopathology. **CONCLUSION** Partial nephrectomy is the standard of care in the treatment of small renal masses with decreased morbidity better Quality of life & physiologic adaptation than radical nephrectomy.

UMP 04 – 12

Inflammatory myofibroblastic tumour of the urinary bladder: case report

Suresh Babu Vedala, Rahul Devraj, Ramachandraiah , VidyasagarS, Ram ReddyC, MurthyPVLN

Nizams Institute of Medical Sciences, Hyderabad

Introduction : Inflammatory myofibroblastic tumour (IMT) is a rare tumor with malignant potential; it is also known as inflammatory pseudotumour. IMT has been described in many major organs, including lungs, liver and skin. In the genitourinary system, IMT likely starts in the bladder, but the lesion has also been reported in the kidneys, prostate, ureter and epididymis. We report a new case of inflammatory myofibroblastic tumour of the bladder, in which the patient presented with gross hematuria. We review the tumour's clinical presentation, diagnosis and pathological features. **Case report :** A previously healthy 23-year-old woman presented with painless gross hematuria in 2 weeks. She had no history of urinary tract infection, calculi, trauma and other urological abnormality. Laboratory studies were normal, except for severe microscopic hematuria. Abdominal ultrasound showed a polypoidal mass on the anterior bladder of size 5.5 x 4.5 cms , Cytological analysis of urine did not show malignant cells. Contrast-enhanced computed tomography (CT) showed a pedunculated enhancing mass arising from the anterolateral wall of the bladder. Transurethral biopsy suggestive of inflammatory myofibroblastic tumour. Open partial cystectomy was performed to remove the tumour . The results of immunohistochemistry (IHC) examination showed: CD117(-); CD34(-); SMA(+); **Discussion :** IMT is a rare pathologic entity composed of myofibroblasts and an accompanying inflammatory infiltrates. IMT was first recognized in the lung. Although some cases of IMT are considered to represent an inflammatory response to infection, trauma or surgery, the etiological factors are not clear. Males were represented slightly more than females (ratio 9:8). The most common symptom of IMT is hematuria. The diagnosis of IMT may remain a dilemma for urologists, radiologists and pathologists. Because the IMT of the bladder has similar clinical features to uroepithelial cancer and it is sometimes aggressive on imaging, this lesion is often mistaken as a malignant process in the diagnostic procedure and during surgery. The diagnosis of IMT is identified by pathological

examination. Immunohistochemical stain can help pathologists confirm the diagnosis. Histologically, the tumour cells were spindle to stellate in shape, widely separated or showed a compact fascicular pattern. The therapy of IMT usually includes TUR, partial cystectomy and radiotherapy. Complete surgical resection is important to avoid local recurrence. Compared with TUR, partial cystectomy is used for most patients. In our case, the patient finally underwent partial cystectomy. Considering the muscle invasive feature of IMT, we think the partial cystectomy may be more reliable to avoid tumor residue. Conclusion : IMT is a rare neoplasm with unknown malignant potential. Typical IMTs can be locally aggressive, and may require radical surgical resection, therefore close follow-up is warranted

UMP 04 – 13

Spontaneous bilateral asymptomatic perinephric urinoma

Tanveer Iqbal Dar, Abdul Rouf Khawaja, Syed Sajad Nazir

GMC Srinagar

Introduction : Perinephric urinoma usually occurs due to extravasation of urine secondary to trauma or obstruction to urinary outflow, or in multiple medical diseases like diabetes mellitus, analgesic nephropathy etc. **Material & Methods :** We present a case of 35 yr old female with no comorbidities with incidental B/L perinephric collection on CECT KUB which was confirmed on percutaneous aspiration with high creatinine. it was managed conservatively. **Results :** On follow up with repeat radioimaging the collection resolved completely with no obstruction to outflow. **Conclusion :** Spontaneous asymptomatic B/L perinephric urinoma is a very rare entity and should be suspected even in absence of any obstruction.

UMP 04 – 14

Right retrocaval ureter with hypoplasia of contralateral kidney

Thilak G, Aysha ShaheenB, ThiruvalluvarPV, PeriasamyP, Deepak M, Pitchaibalanmugam K, Govindarajan P

Stanley Medical College, Chennai

Introduction: This is congenital condition results from altered vascular rather than ureteral development. Normally; IVC originates from the supracardinal and subcardinal veins, inferior and superior to kidney respectively. If the Inferior vena cava inferior to the kidney is formed by subcardinal vein, it will be located anterior to the ureter resulting in retrocaval ureter. **Method:** 43 year old Patient presented with complaints of Right loin Pain for 5 days Colicky, intermittent. Had 4 similar episode in past, managed conservatively. On abdomen examination: Mild Tenderness present in the RT Renal angle Local. **Examination:** Penis/ meatus/ scrotum/ testis-Normal, Digital rectal examination- flat prostate Investigation: B.urea: 40mg/dl, S.Creatinine: 2.0mg/dl, urine C/S: No growth, Hb: 11gm% Plain CT KUB: revealed HUN involving right kidney with ureter found posterior to inferior vena cava at level of L3-L4 with contralateral hypoplastic kidney. **Result:** Right proximal ureter Dilatation present, below dilatation right Ureter was found passing behind & emerging on medial side of Inferior vena cava. Inferior vena cava – Normal, Ureter divided at most distal segment of dilated ureter. Proximal & Distal end transposed anterolateral to IVC, spatulated and Ureteroureterostomy done. **Conclusion:** Right Retrocaval ureter associated with hypoplasia of the contralateral kidney is rare FREIRE Gde C. Retrocaval ureter and hypoplasia of the kidney.

UMP 04 – 15

Recurrent parvovirus B19 infection in post renal transplant recipient

Tuli A, George P, Shah V, Jaiswal A, Francis SK, Mammen KJ

Christian Medical College, Ludhiana

INTRODUCTION: Parvovirus(PV)B19infection is a rare cause of red cell aplasia (RCA) in a transplant patient. Early diagnosis and management of such infection is very important. **CASE REPORT:** A 60 year old male, post renal transplant (sept.2013) done for IgA nephropathy presented with generalized weakness and malena since last 10 days. He was on triple immunosuppression. On admission patient was severely anemic

with no systemic abnormality. He had past history of similar complaints 3 months back blood PCR test identified PV B19. He received intravenous immunoglobulin 20 gram in 100 ml normal saline OD for 5 days. He was discharged in satisfactory condition. Presently he had recurrence of symptoms and investigations revealed Hemoglobin of 6 gm%, TLC-3100/cumm, Platelets 1.2 lakh, urea- 40mg/dl and serum creatinine was 1.4 mg/dl. Peripheral smear examination showed mild anisopoikilocytosis with occasional elliptical cells. He was transfused two units of PRBCs. He was started on IV ganciclovir. Patient underwent bone marrow biopsy which showed erythroid hypoplasia with few giant erythroblasts showing intracellular inclusions strongly consistent with recurrent parvovirus infection. To confirm these findings PCR test for PV B19 was performed which came out to be positive. On quantification study it was 4x10⁴ copies/ml. Patient was started on IV immunoglobulin therapy, 5 gram in 100 ml NS for 5 days. Presently he is on low dose immunoglobulin prophylaxis with 400 mg/month. **DISCUSSION:** Diagnosis of such infection requires high amount of suspicion, mainly in post transplant cases with anemia that is unresponsive to vitamin supplementation and erythropoietin.

UMP 04 – 16

Management of male epispadias: history and evolution

Upadhyay Ravi, Bhat AL, Kumar V, Aeron R, Saxena G, Arya MC

SPMC, Bikaner

Objective: Male epispadias is an exceedingly rare congenital anomaly with an incidence 1 in 117,000 and is not frequently discussed. The objective is to discuss the historical perspectives and evolution of surgical techniques for epispadias management in the current era. First recorded case of epispadias is attributed to the Byzantine Emperor Heraclius. Dieffenbach (1845) was the first surgeon to repair the penile defect without attempting to restore function of the urethra. In 1895, Cantwell performed first true urethroplasty by mobilizing the dorsal urethral plate from the corpora cavernosa and transpositioning the tubularized urethra ventrally. Young in order to prevent devascularization of the urethra, detached it from the right corpora but left the left corporeal attachment. Mays combined Cantwell type tubularization and ventral rotation of the urethral plate with creation of a distal urethra using ventral preputial skin. Swenson buried the longitudinal strip of urethral mucosa and approximated corpora dorsal to it. Modified Cantwell Ransley and Mitchell Bagli are the most commonly performed procedures today. Ransley modified the Cantwell approach by releasing both the corpora and suturing them in middle by creating a raw area on their medial surface with the urethral plate underneath ventrally. His cosmetic results improved but still chordee persisted and continence was an issue. Mitchell disassembled the penis completely into two corpora and urethral plate with spongiosum. It improved the continence, but blood supply to urethra and hypospadiac defect remain a concern. Surgical approaches are still evolving in order to have good cosmesis with achievement of urinary continence simultaneously.

UMP 04 – 17

Seminal vesicle cystadenocarcinoma - a rare case report

Vijayakumar P, Senthilvel, Jayaganesh, KSaravanan, Illango, Govindarajan, N Muthulatha

Government Royaoetta Hospital

Introduction: Primary Tumours of the seminal vesicle are rare. Secondary spread is quite common either due to disseminated disease or by contiguous spread from adjacent organ, most commonly from prostate. There is paucity of data regarding management protocols and most of the time the treatment is individualized. We report a case of seminal vesicle malignancy managed by us **Case Report :** 35/M Unmarried, admitted with C/o strain to void -2 months & constipation, No Co-morbid Illness . On Examination, P/R - Large, hard mass in the region of prostate occluding rectal lumen. Sr.PSA- 2.8ng/dl. USG shows Mixed echogenic mass with altered echoes about 6 x 5x 3 cm in the prostatic region & posterior to urinary bladder. MRI shows large mixed intensity soft tissue mass 8.1x7.1x8.5 cm seen in retrovesical space displaced rectum posterolaterally & Urinary bladder anteriorly. Right seminal vesicle-could not be made out separately. No demonstrable lymphadenopathy. Done digital transrectal biopsy which shows Suggestive of Seminal vesical Cystadenocarcinoma. We planned for Neoadjuvant chemotherapy followed by Radical Excision **Conclusion:**

Management of these tumors should be individualized. Surgery is the best option for localized operable lesions although long term data is not available. Prognosis of patients with a seminal vesicle tumor is generally poor.

UMP 04 – 18

Emphysematous prostatitis : A rare case report

Vikram Nimboor, Luqman Ahammed, Anoop K Sankar, Yunus K K, Aby Madan, Nazar M

Government T D Medical College, Alappuzha

INTRODUCTION : Emphysematous prostatitis (EMP) is a very rare inflammatory condition, characterized by localized collection of gas and purulent exudates in the prostate. It is usually seen in patients with diabetes, bladder outlet obstruction or bladder catheterization and typically presents with fever, irritative LUTS and pelvic or perineal pain. Mortality rate varies between 1% and 16 %. We present a case of EMP which had none of the above risk factors and had an atypical presentation. **METHODS :** Case description A 62 year old male presented with fever and chills, without any urinary complaints or co-morbidities. On clinical examination patient was tachypneic, tachycardic, hypotensive and febrile. Digital rectal examination revealed a tender boggy prostate. Routine blood and urine investigations were unremarkable except leucocytosis. USG abdomen showed right bulky seminal vesical possible granulomatous change. Emergency TRUS revealed a collection within the prostatic parenchyma with air shadows extending into right pararectal area. Findings were confirmed with NCCT abdomen pelvis. **RESULTS :** TRUS guided trans-rectal aspiration was done using 18G needle, about 65 ml purulent material was aspirated. Patient was put on broad spectrum antibiotics. Staphylococcus aureus sensitive to Imipenam was isolated from pus. Patient improved symptomatically and repeat TRUS showed no residual collection. **CONCLUSION :** EMP is an uncommon but relatively serious infection that may cause complications if not diagnosed at an early stage and treated. It can sometimes present without the usual risk factors. Diagnosis may be at times difficult due to atypical presentation.

UMP 04 – 19

CA prostate presenting as groin lymphocele- a unique presentation

Vinu Gopinath, Natarajan K, Chandru T, Shroff S, Venkat Ramanan S

Sri Ramachandra Medical College, Porur, Chennai

Ca prostate is the most common cancer in men. Most common site of metastasis are the lymphnode and the bones. We report a unique presentation of ca prostate which presented as a groin lymphocele. No such presentation has been described in literature previously. Evaluation of the patient who presented as a groin lymphocele revealed the he has CA prostate. He was successfully treated using androgen ablation. He had complete healing of the lesion and significant reduction in the LN mass at follow up.

UMP 04 – 20

Therapeutic trans arterial embolization for a congenital renal av malformation presenting with massive hematuria : a case report

Yunus K K, Aby Madan, Nazar M

Govt. TD Medical College, Alleppey, Kerala

INTRODUCTION & OBJECTIVE : Congenital renal arteriovenous malformations (AVMs) are very rare and can result in significant hematuria. The traditional treatment of AVMs was nephrectomy. Transcatheter arterial embolization of AVMs can be considered safe and effective which leads to resolution of the hematuria while preserving renal parenchyma. **STUDY METHODS:** A 33-year-old woman presented with sudden onset of massive hematuria, right flank pain and clot colic. The patient had no history of renal trauma, urolithiasis, hypertension, surgical intervention, bleeding diathesis, and she was not on any medication. On examination she had pallor (Hb = 7.8 mg/dL) and vitals were stable. Abdominal examination was unremarkable. Coagulation profile was normal. She underwent

ultrasonography which showed right hydronephrosis; cystoscopy revealed right lateralising hematuria and contrast enhanced CT suggestive of right renal AVM. Selective Digital subtraction arteriography (DSA) of right kidney confirmed the presence of an 8.7X16.1mm AVM in the lower pole fed by an intersegmental artery supplying lower pole of the kidney. **RESULTS** Embolization of the feeding artery was done with glue and coil achieving complete obliteration of the AVM. Post procedure, patient became asymptomatic. At follow-up imaging 3 months later, there were no residual lesion and the patient remains free of symptoms. **CONCLUSION** This case highlights the importance of careful diagnostic work-up in the evaluation of upper tract hematuria. Congenital AVMs of the kidney are rare cause of severe hematuria especially in young patients. Transcatheter Arterial Embolization has become the treatment option of choice for the management of severe hematuria caused by renal AVMs

UMP 04 – 21

Bladder Endometriosis: Diagnosis and Management

Dhruvi Amlani

M G M Medical College, Aurangabad

AIM: To discuss the clinical presentation, diagnostic evaluation and management in a rare case of bladder endometriosis. **MATERIAL AND METHODS:** 28 year/female, came with chief complaints of cyclical episodes of frequency, urgency, dysuria and lower abdominal pain during premenstrual and menstrual period for 15 days every month since last 4 years. Patient also had bad obstetric history with 3 intrauterine deaths at full term, 1st being normal delivery followed by 2 caesarean sections. Her menstrual cycles are regular. Patient was investigated with USG suggesting 3.7x2.5 cm ecogenic polypoidal mass projecting from posterior bladder wall, CT scan suggested lobulated heterogeneously enhancing intraluminal polypoidal mass lesion arising from dome of bladder of size 2.5x2 cm. Cystoscopy with biopsy suggest endometriosis of bladder. Open partial cystectomy was done. **RESULT:** Post operative period was uneventful. Histopathology suggested endometriosis of bladder. **DISCUSSION:** Endometriosis occurs in 15-30 % women of reproductive age group, but urinary tract endometriosis accounts for only 1-4% of this population, of which 70-80% involves the bladder. Bladder endometriosis occurs in two forms, primary (spontaneous) and secondary i.e. following iatrogenic cause in the form of previous pelvic surgeries. Bladder endometriosis may occur as a part of deep infiltrating pelvic endometriosis but isolated bladder involvement, like in our case, is extremely rare, only 30 cases reported in literature till date. **CONCLUSION:** Although rare, Bladder endometriosis presents with vague and distressing symptoms resulting in delay in diagnosis and significant morbidity. Strong clinical suspicion and complete clearance in the form of partial cystectomy is the treatment of choice.

UMP 04 – 22

Vesico-cutaneous fistula following tubal ligation

Dhruvi Amlani

M G M Medical College, Aurangabad

AIM: To discuss the clinical presentation, diagnostic modalities and management in a rare case of vesico-cutaneous fistula following tubal ligation, after 4 years. **MATERIAL AND METHODS:** 30 year/female came with chief complaints of lower abdominal pain, pyuria, fever and intermittent purulent discharge from suprapubic scar since 1 month. Scar was of open tubal ligation done 4 yrs back. Patient also gave history of recurrent UTI's and purulent discharge through surgical scar in past 4 years, managed conservatively. On examination patient had puckered midline infraumbilical scar with minimal discharge. USG and CT scan abdomen/pelvis suggested hypo echoic lesion involving anterior abdominal wall and indenting the bladder. Cystoscopy with biopsy suggested extrinsic mass effect indenting bladder dome with internal opening discharging frank pus. Exploration with excision of fistulous tract and suturing of bladder was done. **RESULT:** Postoperative recovery was uneventful. Histopathology report of the excised tract suggested chronic inflammatory tissue. **DISCUSSION:** Vesicocutaneous fistulas, though rare, are known to occur following radiation therapy for pelvic malignancies, post traumatic, secondary to giant vesical calculus and following suprapubic cystostomy. However, post tubal ligation, vesico-cutaneous fistula is not reported in literature till date. Most cases of vesicocutaneous fistulas may present

with urine leak, but longstanding fistulas and fistulas with oblique tracts may close spontaneously at either ends resulting in unusual clinical presentation. **CONCLUSION:** Although rare, vesico-cutaneous fistulas secondary to iatrogenic cause should be considered with high clinical suspicion in patients with previous history of lower abdominal or pelvic surgery. Detailed history and meticulous workup is needed in diagnosis and optimum management of these patients.

UMP 04 – 23

Urethral diverticulum with diverticular large calculus with urethrocutaneous fistula - a rare presentation

Dhruti Amlani

M G M Medical College, Aurangabad

AIM: To discuss the clinical presentation, diagnostic modalities and treatment in a case of urethral diverticulum with diverticular large calculus with urethrocutaneous fistula. **MATERIAL AND METHODS:** 70 year/ male came with chief complaints of swelling over scrotum, watery discharge through a single opening on the scrotum, dribbling of urine with poor stream since 3 years. On examination, evidence of 5x5

cm stony hard globular mass occupying right hemiscrotum, right testis displaced, left testis palpable and normal. Single discharging fistulous opening at the base of scrotum. USG was suggestive densely calcified mass in right scrotum with posterolateral displacement of right testis with left epididymoorchitis. X-ray KUBU suggestive of radio opaque shadow below pubic symphysis. ASU and MCU suggestive of urethral diverticulum with large diverticular calculus at penobulbar junction. Cystoscopy revealed large diverticulum at penobulbar junction through which stone surface was seen. Open exploration with extraction of calculus with diverticulectomy and closure of urethral mucosa over foley catheter was done. **DISCUSSION:** The overall prevalence of urethral diverticulum in both sexes is between 0.5-5%. It is more common in females and rare in males. As suggested by Watts in 1906 urethral diverticulum can be congenital (10%) or acquired (90%). Patients remain asymptomatic until complications arise and patients present with obstructive voiding symptoms, post micturition dribble, recurrent UTI's, and perineal swelling. ASU, MCU and cystoscopy are diagnostic investigations of choice. Treatment depends on size and location of diverticulum and stone in the form of extraction of stone and primary anastomosis after excision or substitution urethroplasty. **CONCLUSION:** For large urethral diverticulum with stone, extraction of calculus with surgical excision of diverticulum with urethral reconstruction is the treatment of choice.