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Indian Journal of Urology

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Indian Journal of Urology is peer-reviewed journal published on behalf of Urological Society of India and issues are published quarterly in the last week of March, June, September and December. The journal publishes research papers, reviews and cases related to Urology including oncology, sexual dysfunction, incontinence, endourology, trauma and reconstructive surgery, andrology, transplantation, imaging, pathology.

Abstracting and Indexing Information

The journal is registered with the following abstracting partners: Baidu Scholar, CNKI (China National Knowledge Infrastructure), EBSCO Publishing's Electronic Databases, Exlibris – Primo Central, Google Scholar, Hinari, Infotrieve, National Science Library, ProQuest, TdNet. The journal is indexed with, or included in, the following: DOAJ, EMBASE/ Excerpta Medica, Emerging Sources Citation Index, Indian Science Abstracts, IndMed, PubMed Central, Scimago Journal Ranking, SCOPUS.

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Copies of the journal are provided free of cost to the USI members. A subscription to The Indian Journal of Urology comprises 4 issues. Prices include postage. Annual Subscription Rate for non-members-

- Institutional: INR 4000 for India, USD 300 for outside India
- Personal: INR 2000 for India, USD 150 for outside India

For mode of payment and other details, please visit www.medknow.com/subscribe.asp

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Editorial office:

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Published by

Wolters Kluwer India Private Limited,
A-202, 2nd Floor, The Qube, C.T.S. No.1498A/2 Village Marol,
Andheri (East), Mumbai - 400 059, India.
Phone: 91-22-66491818
Website: www.medknow.com

Printed at

Nikeda Art Prints Pvt. Ltd., Bhandup (W), Mumbai.
Abstracts - USICON 2019

BRIJ KISHORE PATNA PRIZE PAPER SESSION

BKP 01
Urogynecological fistulae: A single centre experience of 40 patients
Leela Krishna Karri, Venkat Ramanan, Sriram Krishnamoorthy, Natarajan Kumeeran, T. Chandru
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Introduction: Most of fistula iatrogenic, may occur as a result of congenital anomalies, malignancy, inflammation and infection, radiation, therapy, surgical or external trauma, ischemia, parturition resulting in a great deal of incontinence, discomfort, and physical disability for the affected individual. Materials and Methods: This is observational study done in department of urology and renal transplantation for period of 5 years from January 2013 to January 2018. Inclusion Criteria: All the patients with confirmed urogynecologic fistulae either diagnosed at the study institute or referred from outside were included in this study. Exclusion Criteria: Patients with anatomical urinary incontinence from other causes. Results and Observations: (1) A total of 40 patients were studied, 31 patients were diagnosed with vesicovaginal fistula, 9 patients with ureterovaginal fistula, (2) Highest number of cases 31 were reported following abdominal hysterectomy, 9 cases following vaginal hysterectomy, (3) All cases of vvf presented with total incontinence with in 6 months to 2 years, whereas uvf presented with normal voiding associated with incontinence in time period of 5 months to 2 yrs (4) Size of fistulae varied from <1 cm to >4 cm, majority had 1-2 cm fistula (5) VVF 23 patients had supratrigonal 26, trigonal 5, (6) 26 patients had abdominal o’cornment repair, 4 patients had vaginal repair, 1 patient underwent laparoscopic vvf repair (7) 9 patients of UVF repair were managed with ureteral stenting in 6 patients, 3 patients required ureteric reimplantation (8) Post operative complications such as wound infection is seen in 6 patients, wound dehiscence in 1 patient, recurrence in 2 patients, bladder dysfunction in 4 patients. Conclusions: (1) Urogynaecologic fistulae are devastating conditions that severely affect the quality of life of women (2) Thorough evaluation and planned surgical management are essential to correctly diagnose and treat this condition, successful outcome can be achieved with carefully planned and performed surgery (3) Best chance of successful repair is at first attempt, both abdominal and vaginal approaches for vvf can give excellent results in carefully selected cases (4) For ureterovaginal fistulae, ureteral stenting can be tried at first attempt and will be successful in a small fistful, (5) Unobstructed post operative urinary drainage is essential for successful healing of fistula (6) Regular follow up is essential to detect any complications and their successful outcome.

BKP 02
Implementation of enhanced recovery after surgery protocol in patients undergoing robot assisted radical cystectomy with intracorporeal ileal conduit urinary diversion for bladder cancer: An outcome analysis beyond the learning curve
S. Tamhankar Ashwin, Gagan Gautam
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Introduction: Robot assisted radical cystectomy (RARC) with intracorporeal ileal conduit urinary diversion (IIC) has a steep learning curve. Though the combination of enhanced recovery after surgery (ERAS) protocol and completion of learning curve for RARC-IIC has the best possible potential to decrease the overall morbidity, current evidence in this regard is quite limited. Methods: We conducted an outcome analysis of a prospectively maintained database of patients undergoing RARC-IIC with ERAS principles operated by single surgical team at a tertiary care centre, after excluding initial 30 patients amounting to the learning curve as per Pasadena consensus panel, after IEC approval. Results: 27 consecutive patients (excluding initial 30 out of total 57) with a median age of 69 years were evaluated. Median total console time and console time for diversion was 270 minutes and 80 respectively. Median estimated blood was 300 cc. Ryle’s tube was removed immediately after the procedure and oral liquids were started on the first day in all. Median length of stay was 6 days (4-30). Overall and major (Grade 3) complication rates were 51.8% (14/27) and 11.1% (3/27) respectively, without any 90 day mortality at a median follow up of 11 months (1-27). Conclusions: ERAS protocol can be safely implemented in patients undergoing RARC-IIC. While the initial outcomes of this combined treatment strategy appear promising in terms of complication rates and perioperative parameters, greater insight is needed from multi-institutional data and prospective comparative studies to establish the true value of RARC/IIC and ERAS protocol in the treatment of bladder cancer.

BKP 03
Exstrophy epispadias complex – Our experience
Arya Mukesh Chandra, Gupta Chirag, Kumar Mudit, Hariyawat Bhuru Singh, Yogendra, Singh Abhiyuthan, Vasudeo Vivek
SP Medical College, Bikaner, Rajasthan, India

Objective: To present our 9 bladder exstrophy (1 adult) and 10 epispadias cases who underwent total reconstruction. Methods: During the time period of last 5 years nineteen patients with Bladder Exstrophy and Epispadias Complex were managed at our centre. Out of nine exstrophy case, 8 were newborn. In these 5 were male and 3 were females. Males and Females were treated in 3 and 2 stages respectively, however few patients did not turn up for subsequent stages after bladder closure. A 19 year old (reared as male) presented with urinary incontinence found to have classical female exstrophy. Bladder closure, bilateral ureteric reimplantation and bladder neck reconstruction done in stage one and bladder augmentation was done in second stage. Results: Follow-up ranged from 9 to 56 months. Three had wound infection. The adult case had vesicocutaneous fistula formation for which secondary closure with rectus abdominis flap is planned. 2 patients had vesicle calculi managed with suprapubic cystolithotomy. Urine tests, radiography and cystoscopy done in followup. All patients showed marked satisfaction and improved self esteem following surgery. Conclusion: Exstrophy epispadias complex is rare and requires high level of surgical skills and experience. Ultimate goal of urinary continence can be achieved by staged procedure with meticulous repair, and multidisciplinary approach in newborn. Bladder preservation is possible in adults with augmentation in the absence of histologic changes. Abdominal wall closure in adult may need flap.

BKP 04
Intermittent catherisation confers immunity against urethral stricture. Fact or fallacy? Incidence of urethral stricture in indian sci patients being treated with clean intermittent catherisation
Vineet Naran, D. Sumant, S. Gunawan, I. N. Verma, B. L. Choudhary
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Introduction: Clean intermittent catherisation (CIC) is the gold standard for bladder evacuation in individuals with neurogenic bladder. Intermittent self dilatation has been used extensively after endoscopic treatment of urethral stricture to prevent its recurrence. It is a popular
misconception that patients of Spinal cord injury (SCI) do not develop stricture urethra as they are employing CIC for emptying their bladder. We present our data showing a high incidence of stricture in Indian SCI patients using CIC. Methods: Patient database of SCI men who followed up in the OPD for urodynamic study was evaluated from a period of 2014 -2017. Only those patients who employed CIC to manage their bladder were included. Urethral stricture was defined as narrowing of urethral lumen in a patient with inability to introduce a 14 Fr catheter. Diagnosis was confirmed by retrograde urethrogram and flexible cystoscopy. Results: A total of 1200 SCI patients on CIC were included. Median age of the men was 41 years and mean duration of self catheterisation was 6 years. 612 patients (51%) were identified to have stricture urethra. 50% (300) of these patients were not willing for any intervention and shifted to CIC with a smaller diameter catheter. About one fourth of these patients underwent an optical urethrotomy and remaining one fourth were treated by passive urethral dilatation. Conclusion: The occurrence of urethral stricture in Indian SCI men using CIC is almost 50%. This number is much higher than reported in world literature. Contrary to popular belief that regular catheterisation will protect against stricture urethra, in-fact trauma by repeated catheterisation may potentiate stricture formation. Adverse factors for stricture formation were CIC done by care giver, non sensate urethra (complete injury), poor socio economic status (catheter reuse, inadequate lubrication).

BKP 05
Fluoroscopy free retrograde intra renal surgery – Is it feasible?
P. M. Siddalinga Swamy

Introduction: In recent years Retrograde intra renal surgery (RIRS) is one of the most preferred modality for renal stone less than 2 cm. Crucial steps require fluoroscopy exposure leading to increased exposure to radiation to the patient, surgeon and staff in the operation theater. Increased exposure to radiation has adverse effects of ionizing radiation and increased risk of cancer. We describe our method of RIRS where in no c arm is used so that the risk of radiation exposure can be minimized. Aim and Objective: The aim is to know the outcome of RIRS without fluoroscopy with respect to stone free rate and complications. Materials and Methodology: A retrospective study was done at our hospital from Feb 2014 to May 2018. Inclusion Criteria: Solitary renal stones less than 2 cm were included in the study. Exclusion Criteria: Bilateral renal stones, upper ureteric stones, abnormal anatomy and pediatric patients were excluded from the study. All patients had ultrasound of abdomen and pelvis and computed tomography of kidney ureter and bladder (CT KUB) for diagnosis. Informed consent was obtained from all patients. Preoperative antibiotic was given as per hospital antibiogram.

CHANDIGARH BEST VIDEO SESSION

CBVP 01
Ambulatory supine percutaneous nephrolithotomy in flank free oblique supine modified lithotomy position: Our point of technique
A. K. Sharma, Rahul Yadav, Vikas Sharma, Shajib Fareedi
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Introduction: We intend to describe standardised technique of Ambulatory Supine PCNL (Tubeless under spinal anaesthesia: SA with discharge within 24 hrs). Technique: Patient Positioning: SA, patient is positioned in Flank Free Oblique Supine Modified lithotomy (FOSML) Position. This position benefits one time painting and draping for simultaneous lower tract (for cystoscopy and ureteric catheterization) and upper tract (puncture and stone removal) access during surgery. Puncture and Dilatation: Puncture is done in desired calyx by triangulation technique under Fluoroscopic/ultrasound guidance. Step dilatation with 24 Fr Amplatz Dilator was done after putting guide rod. Stone fragmentation and extraction: Fragmentation is done with desired energy and most of the stone fragments drained under gravity. Confirmation of clearance done on fluoroscopy. Surgery done in sitting position with ergonomic advantages to surgeon. System Drainage: Post Procedure, ureteric and Foley catheter was left which is removed next day at the time of discharge (within 24 hrs) without the need of Nephrostomy or DJ stent. Conclusion: FOSML position helps in quick positioning after induction of anaesthesia. It also imparts all the advantages of other supine PCNL positions while overcoming their limitations like difficult superior calyceal access or spine superimposition. This position is easy, uncomplicated with various advantages over previously described positions for supine PCNL. In our vast experience, it has been found as most versatile position in terms of stone access (superior calyx) and simultaneous retrograde access to both systems, saving precious anaesthesia and OR time which finally resulted in quick recovery & early discharge.

CBVP 02
Stepwise approach of testicular sperm extraction in non-obstructive azoospermia
Amit Tripathi, Rupin Shah
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Introduction: Men with NOA, require sperm retrieval along with intracytoplasmic sperm injection (ICSI) for fathering children. Even though a variety of techniques have been described, there is confusion about which method of retrieval is best suited for a given patient, and most clinics tend to apply the same technique to all patients, which may not be in the best interest of a specific patient. In the same session, we start with needle aspiration biopsy (NAB), and then proceed to open single seminiferous tubule (SST) mapping followed by micro-TESE if sperms are not found in the preliminary steps. In this video we will illustrate each of these steps which has been performed in case of non obstructive azoospermia. Materials and Methods: Sixteen men with diagnosed NOA who were undergoing surgical sperm retrieval for ICSI were included in the study. We employed a stepwise approach of NAB followed by SST mapping and then micro-TESE on one testis followed by the other testis. Results: Following the staged approach sperms were retrieved by less invasive methods like NAB and SST in 43.75% of cases and additional 18.75% of sperm was retrieved by m-TESE. Conclusion: The ideal procedure is one that retrieves an adequate number of sperm with least trauma and discomfort to the patient. Thus by following the step wise approach one can optimize the sperm retrieval by minimising the invasiveness of the procedure in a single session.

CBVP 03
Robotic renal transplantation in cases with complex vascular anatomy
T. A. Kishore, R. Vishnu, Himanshu Sharma, Sunil Bhat, M. K. Ramaprasad
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This video depicts the feasibility of Robotic assisted renal transplant in double vessels, right sided graft and atherosclerotic external iliac vessel. Methods: The video comprises of 5 different cases of renal transplantation 1. Demonstrates the technique of Trousering in bench in equal sized renal arteries and the vessel is anastomosed to the external iliac. 2. Here the vessels are anastomosed in bench, end to side in unequal sized renal arteries and subsequent anastomosis to external iliac vessel. This also is a case of atherosclerotic external iliac vessel, where the plaques are stabilized and vascular anastomosis is being performed. 3. The vessels are anastomosed separately into the external iliac vessel in case of medium sized double vessels. 4. Demonstrates the technique of robotic transplant where the second vessel is anastomosed to inferior epigastric artery 5. Right sided graft in a case of auto transplantation to external iliac vein. Results: All the patients had immediate graft function, and achieved nadir creatinine with in 72 hours. There were no post-operative complications. Conclusions: With increasing experience Robotic transplant can be performed in grafts with complex renal anatomy and atherosclerotic vessels.

CBVP 04
Simultaneous bilateral laparoscopic adrenalectomy for pheochromocytoma in men syndrome
Rakesh Sharma, Ashwin Giridhar, T. S. Rao
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Introduction and Objective: Laparoscopic Adrenalectomy for MEN 2A patients has been the technique of choice for MEN 2A syndrome but there has been limited literature on the technique of simultaneous bilateral adrenalectomy in MEN 2A syndrome. Methods: A young lady presented with thyroid swelling and bilateral neck nodes, on further evaluation she was diagnosed to have Medullary carcinoma thyroid with malignant neck nodes. On whole body FDG PET imaging she was evaluated to have bilateral adrenal enlargement with raised plasma free metanephrines. In view of bilateral pheochromocytoma she was planned for a bilateral adrenalectomy followed by treatment for thyroid malignancy. Bilateral simultaneous laparoscopic adrenalectomy was planned. First Rt side was approached in the lateral decubitus position with standard ports and the camera port at the umbilicus. There was minimal blood loss and the operative time was 45 minutes, specimen was placed in endobag and placed securely in the intraperitoneum later the patient was positioned for the Lt side lateral position and through standard ports the procedure was completed. There was minimal blood loss and the specimen retrieved through the camera port via an endobag. Total operative time including the positioning and re-positioning was 150 minutes. Results: Excellent postoperative recovery with minimal scar and blood loss Final HPE – pheochromocytoma. Conclusion: Simultaneous Bilateral Laparoscopic Adrenalectomy For Pheochromocytoma is a safe and effective procedure.

CBVP 05
Robot assisted partial nephrectomy in unusual and challenging clinical scenarios: Our experience
Saurabh Patil, Ashwin Thamhankar, Surya Prakash Ojha, Puneet Ahiwalia, Gagan Gautam
Max Super Speciality Hospital, Saket, New Delhi, India

Introduction: Robot assisted partial nephrectomy (RAPN) is now gaining the popularity as a minimal invasive approach to manage small renal masses (SRMs). However, surgeons may face technical difficulties in certain situations. Horseshoe kidney, because of complex renal anatomy, and radio frequency ablation, due to dense intraoperative adhesions are such difficult scenarios. We share our experience of such unusual and challenging scenarios managed by robotic approach. Methods: Our 1st case is a 55-year-old diabetic hypertensive female with a large upper polar mass extending up to renal sinus (RENAL score 9x), with a history of percutaneous radio frequency ablation. We had difficulty in upper pole mobilisation due to dense perirenal adhesions and in the localization of tumor resection margins due to its endophytic nature. 2nd case is a 34-year-old gentleman with 5x5 cm mass (RENAL score 9A) in lower pole of left moiety of a horseshoe kidney with two accessory renal arteries. We could clamp the accessory vessel supplying the tumor using intraoperative use of near Infra-Red fluorescence (NIRF). Results: Total console time was 263 and 297 minutes and warm ischemia time 50 minutes and 0, for 1st and 2nd case respectively. Total hospital stay was 3.5 and 5.5 days. In first case the superficial horizontal group was missed on the right side since the inguinal ligament was not completely exposed. Four groins had one or more positive lymphnodes. Three patients had transient lymphedema, which resolved in mean follow of 10.5 months. One groin had lymphocele which was managed with aspiration. None had skin complications. There was no recurrence with mean follow up of 10.5 months. Conclusion: In our initial experience, Laparoscopic VEIL is a safe and feasible with satisfactory oncological outcome provided suitable initial space creation and step wise surgical nuances are followed. Considering very low morbidity and simplicity of procedure it is likely to replace the conventional open Illo-inguinal lymphnode dissection as standard of care.

CBVP 06
Saphenous vein sparing video endoscopic inguinal lymphadenectomy: Technical details with special emphasis to creation of plane of dissection
Sureka Sanjoy Kumar, Kumar Madhavan, Jena Rahul, Kapoor Rakesh, Pratap Uday
SGPGIMS, Lucknow, Uttar Pradesh, India

Introduction: Over last one decade, Video endoscopic inguinal lymphadenectomy (VEIL) has been popularised for surgical treatment of groin metastasis in penile cancer to duplicate the open template reducing morbidity and without compromising the oncological control. Creating a suitable initial space for carbon-dioxide insufflation is a crucial step for successful VEIL. There are debates in the literature regarding the plane of initial port placement at subsacrpa’s plane or below the camper’s fascia. We present our experience with Saphenous vein sparing laparoscopic VEIL, a minimally invasive approach to avoid complications highlighting the important surgical steps with special emphasis on suitable plane of initial entry. Materials: Between October 2016 and January 2018, VEIL was performed for 8 groins in 5 patients including superficial vein in 4 groins. After suitable positioning of patients markings were done for femoral triangle and port placement. The video monitor was positioned at the contralateral side. An incision of 1-1.5 cm in the skin was made 2 cm below the apex of femoral triangle. A plane was developed deep to Scarpa’s fascia with balloon insufflations by around 250 ml of air. Using thirty-degree telescope further dissection was done to develop the space. Two additional 10 mm ports were placed medially and laterally keeping the note of ergonomic proficiency. Transillumination and surface markings allow good orientation, maintenance of correct plane as well as adequate space for dissection. The dissection was carried out deep to the Scarpa’s fascia. The main landmarks of dissection were medially the adductor longus muscle, laterally - the Sartorius muscle, superiorly - the external oblique aponeurosis and inguinal ligament, and the inferior margin were the apex of the femoral triangle. The saphenous vein was identified medially and preserved in all cases. The initial dissection was done on the floor to remove all the fibrofatty and lymphatic tissue with identification of SFJ, femoral artery and vein. Further dissection on the floor was done depending on the extent of proposed surgery. All the fatty and lymphatic tissue above the fascia covering the muscle was separated. Then the dissection was carried out at roof to remove all fibrofatty tissue till camper’s fascia and superiorly exposing the inguinal ligament. The dissection was completed, and specimen consisted of all the fibrofatty tissue with deep and superficial inguinal lymph nodes. Results: Mean age of our study population was 53.3 yrs. Mean duration of surgery per groin was 75 minutes (60-110) with no intraoperative complication. Mean lymphnode yield was 11.5 (8-14) and mean hospital stay was 5.5 days. In first case the superficial horizontal group was missed on the right side since the inguinal ligament was not completely exposed. Four groins had one or more positive lymphnodes. Three patients had transient lymphedema, which resolved in mean follow of 10.5 months. One groin had lymphocele which was managed with aspiration. None had skin complications. There was no recurrence with mean follow up of 10.5 months. Conclusion: In our initial experience, Laparoscopic VEIL is a safe and feasible with satisfactory oncological outcome provided suitable initial space creation and step wise surgical nuances are followed. Considering very low morbidity and simplicity of procedure it is likely to replace the conventional open Illo-inguinal lymphnode dissection as standard of care.

CKP MENON BEST PAPER PRIZE SESSION
CKP 01
Predictors of progression free survival and overall survival in metastatic non clear cell RCC: Finding the devil in the dark
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Introduction and Objective: Due to the infrequency of non-clear cell RCC, there is currently a paucity of high-quality literature to help guide the effective treatment of these tumors. Recently, biomarkers such as platelet to lymphocyte ratio (PLR), lymphocyte to monocyte ratio (LMR), systemic immune inflammation index (SII) and CRP/Albumin ratio have demonstrated to be closely related to poor prognosis of patients with RCC. The objective of this study was to evaluate these biomarkers for determining the PFS and OS in patients with metastatic non clear cell cancer. Methods: We retrospectively reviewed 31 cases diagnosed with metastatic non clear cell RCC from January 2012 and December 2017. We assessed the prognostic value (overall survival and progression free survival) of pretreatment PLR, LMR, SII index and CRP/Albumin ratio based on univariate analysis and Kaplan- Meier survival curve. Results: Median time of overall survival (OS) and progression free survival (PFS) were 62.12 weeks (95% CI: 54.61 – 609.69) and 43.44 weeks (95% CI: 35.97-50.90), respectively. The median PFS (.001) and OS (p=.01) was shorter in patients with PLR > 171, LMR < 7.61, SII > 883 (p=.064) and CRP/Albumin > 0.11 (p=.229). Scan to surgery time (3.91 months. Conclusion: In our initial experience, Laparoscopic VEIL is a safe and feasible with satisfactory oncological outcome provided suitable initial space creation and step wise surgical nuances are followed. Considering very low morbidity and simplicity of procedure it is likely to replace the conventional open Illo-inguinal lymphnode dissection as standard of care.
**CKP 01**

Association of spontaneous expulsion with C-reactive protein and other clinico-demographic factors in patients with lower ureteric stone

Amit Jain, K. S. Sreerag, R. Manikandan, L. N. Dorairajan, Sidhartha Kalra, Vijay Kumar

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Introduction: Aim of study is to find out definitive relation of C-reactive protein (CRP) and other factors with spontaneous stone passage in patients with distal ureteric calculus of 5-10 mm and to calculate risk of failure of medical expulsive therapy (MET) in particular patient with defined parameters. Materials and Methods: 185 patients of ureteric colic were included prospectively from August 2016 to May 2018. All patients started MET and followed for 4 weeks. Patients were divided into two subgroups. Subgroup A included successful spontaneous passage patients and subgroup B included failure. We compared age, gender, longitudinal and transverse diameter of stone, CRP, TLC, proximal and distal ureteric diameter and Hydroureteronephrosis (HUN). We performed univariate and multivariate analysis. To define individual risk, all patients divided according to number of significant factors and estimated success rate. Results: 122 (65.90%) patients included in subgroup A and 63 (34.10%) included in subgroup B. In univariate analysis CRP, longitudinal and transverse diameter of stone, HUN, proximal and distal ureteric diameters were significant. In multivariate analysis CRP (p=0.002), longitudinal diameter of stone (P=0.001) and HUN (p=0.005) were significantly associated with expulsion. Cut-off for CRP was 0.41 mg/dl and longitudinal diameter was 6.7 mm. Success rate in patients with no risk factor was 96.7% and with all three risk factors was 16.7%. Overall adjusted success rate after exclusion of patients with all three significant parameters was 85.40%. Conclusion: Patients with longitudinal diameter of stone>6.7 mm, HUN and CRP>0.41 mg/dl should be considered for early intervention. Success rate of MET can be increased to 86% after exclusion of patients with all three risk factors.

**CKP 03**

Urinary aquaporin-1 concentrations in imaged renal masses: To evaluate its role as a biomarker for renal cell carcinoma

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Introduction: Aquaporin-1 (AQP-1) has been under investigation as a promising potential urinary biomarker for renal cell carcinoma. There are reports suggesting high sensitivity and specificity of this marker. The aim of this study was to ascertain baseline urinary AQP-1 concentrations in healthy individuals and compare them with patients with imaged renal masses. Methods: Urinary AQP-1 concentrations were measured by an ELISA kit and normalized by measuring urine creatinine simultaneously. A fresh collected urine specimen was frozen at -80 degrees after addition of a protease inhibitor. A total of 72 subjects were planned for enrollment with an equal number of cases and controls. However, the study was concluded after 4 weeks. Patients were divided into two subgroups. Subgroup A included successful spontaneous passage patients and subgroup B included failure. We compared age, gender, longitudinal and transverse diameter of stone, CRP, TLC, proximal and distal ureteric diameter and Hydroureteronephrosis (HUN). We performed univariate and multivariate analysis. To define individual risk, all patients divided according to number of significant factors and estimated success rate. Results: 122 (65.90%) patients included in subgroup A and 63 (34.10%) included in subgroup B. In univariate analysis CRP, longitudinal and transverse diameter of stone, HUN, proximal and distal ureteric diameters were significant. In multivariate analysis CRP (p=0.002), longitudinal diameter of stone (P=0.001) and HUN (p=0.005) were significantly associated with expulsion. Cut-off for CRP was 0.41 mg/dl and longitudinal diameter was 6.7 mm. Success rate in patients with no risk factor was 96.7% and with all three risk factors was 16.7%. Overall adjusted success rate after exclusion of patients with all three significant parameters was 85.40%. Conclusion: Patients with longitudinal diameter of stone>6.7 mm, HUN and CRP>0.41 mg/dl should be considered for early intervention. Success rate of MET can be increased to 86% after exclusion of patients with all three risk factors.

**CKP 04**

Is uroflow reproducible in healthy boys?

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Introduction: There are various nomograms of uroflowmetry in adults that have confirmed reproducibility. However in children the age at which uroflowmetry is reproducible has not been studied. Aim: To study the reproducibility of uroflowmetry in children aged 5-15 years and to establish the age at which uroflowmetry is representative. Materials and Methods: Of 291 boys screened, Uroflowmetry was done in 247 eligible boys. The flow was repeated at 2 weeks. A total of 227 children were included for analysis. 20 were excluded due to a voided volume less than 50 ml and/or an interrupted pattern of flow. The maximum flow rate (Q-max), average flow rate (Qmaxavg), voided volume (VV), time to maximum flow, flow time and voiding time was recorded. The reproducibility of all parameters was assessed using Inter-correlation coefficient (ICC) and correlation using Pearson’s coefficient. Results: Q-max, Q-maxavg showed good to excellent concordance in boys of 5-15 years [ICC>0.6], implying the flows were reproducible. VV showed good to excellent concordance in boys of 8-15 years [ICC>0.6], showed only moderate correlation in 5-7 years [ICC 0.4-0.6] probably due to the wide variation in the voided volumes. Q-max and Q-maxavg showed significant correlation, in all age groups, with voided volume, in first and second flow [Pearson’s coefficient: 0.49 & 0.53 for Qmax1 and Qmax2; 0.48 & 0.51 Qmaxavg1 and Qmaxavg2 respectively], implying reproducibility of flow in this age group. Conclusion: Uroflowmetry is reproducible in children aged 5-15 years. Q-max and Q-maxavg are representative across all age groups studied.

**CKP 05**

Study on immune response to intravesical bacillus calmetteguriene in non-muscle invasive bladder cancer

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Introduction: Intravesical BCG is the gold standard adjuvant treatment for non-muscle invasive bladder cancer (NMIBC). It is postulated that BCG response and adverse effects are cytokine mediated. The aim of the study was to know the urinary cytokine response pattern and to find association between their levels, and disease response/adverse effects. Methods: All patients with histologically proven NMIBC in intermediate or high risk category were included prospectively. Urinary levels of IL-2, IFN-γ and TNF-α were measured using ELISA kits at baseline, 6th week and at 3 month after intravesical BCG (120 mg, Danish1331 strain). Cystoscopy was done as per a standard follow-up protocol. Adverse effects were quantified using ICIQ-OAB questionnaire. Results: Forty-nine patients were included for the final analysis. Heterogeneity of measured cytokines was significant between responders and nonresponders. However, significant differences in cytokine levels were found between responders and nonresponders at 6th week (IL-2: p=0.043), 3 month (IFN-γ: p=0.029). Higher IL-2 and IFN-γ levels were associated with greater adverse effects. Conclusion: We conclude that cytokine response to intravesical BCG is heterogeneous. TNF-α could be a marker of tumor response while high IL-2 and IFN-γ are associated with BCG adverse effects.

**CKP 06**

Obstructive index – A novel predictor of failure of conservative management in antenatally detected pelviureteric junction obstruction using EC scan and ultrasonographic parameters: A single centre study

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Objective: To analyze renal scan and ultrasonographic parameters to find obstructive index and its impact as a predictor of failure of conservative management in antenatally detected PUJO. Materials and Methods: Records of 180 cases of antenatal hydronephrosis (ANH), presenting to our...
centre from January 2011 to January 2017 were retrospectively analyzed. Patients with ipsilateral or contralateral kidney, bilateral PUJO, solitary kidneys, calculus disease and anatomic and neurogenic abnormalities were excluded from the analysis. Patients who underwent surgery at presentation were also excluded. The pelvic antero-posterior diameters of the affected [PAPD(A)] and normal kidneys [PAPD(N)] on the postnatal ultrasound scan at 6 weeks were noted. The T1/2 of the affected kidney (T1/2 (A)) and the normal kidneys (T1/2 (N)) on diuretic renal scan were also noted. Obstructive Index (OI) as defined by [PAPD(A) ⋅ T1/2 (A)] / [PAPD(N) ⋅ T1/2 (N)] was calculated for each patient. Results: The records of 135 renal units who had qualified for initial observation were analyzed. Of these, 30 renal units (22.2%) required pyeloplasty at a time ranging from 4 to 80 months and a median of 9 months. Mean OI in patients requiring pyeloplasty was 29.99 ± 34.65 compared to 5.48 ± 3.84 in patients who did not (p = 0.005, Mann-Whitney). Using ROC analysis, area under curve for OI was 0.95. A value of 12.2 for OI could predict failure of conservative management with a sensitivity of 93.3% and a specificity of 92.4%. A value of 2.7 cm for PAPD (A) could predict need for surgery with a sensitivity of 70% and a specificity of 83.6%. Conclusion: PAPD at presentation is an established predictor for need of surgery in cases of ANH due to PUJO. Together with EC scan parameters and the calculation of OI, the need for surgery can be reliably predicted with high sensitivity and specificity.

**CKP 07**

A prospective randomized double blind, parallel group, single centre based study to evaluate the efficacy of tadalafil with dutasteride combination therapy versus tamsulosin with dutasteride therapy in patients with lower urinary tract symptoms secondary

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Purpose: To evaluate the efficacy and safety of Tadalafil with Dutasteride combination therapy versus Tamsulosin with Dutasteride therapy in relieving LUTS secondary to BPH. Materials and Methods: Males over 45 years having LUTS secondary to BPH, IPPS >12 points, prostate volume > 30 ml (TRUS), PSA <4 ng/ml, and Qmax<18 ml/s with a minimum voided volume of 100 ml were enrolled to receive randomly Tadalafil with dutasteride (5/0.5 mg) or Tamsulosin with dutasteride (0.4/0.5 mg orally once daily for 6 months). Details including IPPS score, IIEF-5 score, Uroflowmetry, TRUS were recorded at every visit (0, 1, 3, 6 months). Results: Of 242 screened, 55 of 67 patients in DUT/TAM group and 50 in DUT/TAD group completed this study. LS mean IPPS score change of -8.26, -11.26, -14.5 points of DUT/TAM group versus change of -5.92, -8.05, -13.59 points in DUT/TAD group seen (p=0.001, 0.02) with area under curve (AUC) of 0.866 (95% CI: 0.809-0.924) (p <0.001). Conclusion: Tadalafil with Dutasteride therapy is more effective than Tamsulosin with Dutasteride therapy in relieving LUTS secondary to BPH.

**CKP 09**

Human papilloma virus subtyping and telomerase activity in penile carcinoma in Indian patients: Prevalence, and correlation with clinico-pathological staging

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Introduction: Carcinoma penis is an especially distressing disease. Etiology is multifactorial and clear association between HPV (Human Papilloma Virus) infection and penile cancer has been established. Objectives: We sought to provide novel data about prevalence of HPV in Penile cancer in Indian patients, correlating results with clinico-pathological parameters and checked telomerase activity as signature of HPV activity. Methods: The study enrolled 30 patients with carcinoma penis as cases and 12 patients who underwent circumcision for phimosis as controls. Both groups underwent DNA isolation for HPV subtyping and Telomerase activity testing as signature of HPV activity. Results: In carcinoma penis patients, 20% patients were HPV16 positive and 33.3% patients were HPV18 positive. 33.33% patients were positive for either HPV16 or 18. In controls, 16.6% patients were HPV positive. Stagewise, 25% patients of Stage 0, 33% of Stage I, 39% of Stage II, 50% of Stage III and 17% of Stage IV were positive for HPV16 or 18. 20 patients had pathologically lymph node negative status (Stage 0, I and II), out of which, 7 patients (35%) were HPV positive. 10 patients had positive lymph nodes (Stage III and IV) and 3 patients (30%) were HPV positive. Telomerase activity was significantly increased in tissue of patients compared to control. Conclusion: This maiden study substantiates the prevalence of HPV16 & 18 infection in penile cancer patients which is independent of clinico-pathological staging. Higher telomerase activity in HPV positive subjects suggests HPV involvement in this disease.

**SS BAPAT PRIZE PAPER SESSION**

**INT 01**

Tissue engineered indigenous pericardial patch urethroplasty: A promising solution to a nagging problem

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Introduction and Objective: Urethral stricture is a highly prevalent disease and has a continued rising incidence. The global burden of disease keeps rising as there are significant rates of recurrence with the existing management options with the need for additional repeat procedures. Moreover, the existing treatment options are associated with significant morbidity in the patient. Long segment urethral strictures are most
commonly managed by augmentation urethroplasty. We explored the potential for the application of an acellular tissue engineered bovine pericardial patch in augmentation urethroplasty in a series of our patients suffering from urethral stricture disease. The decreased morbidity due to the avoidance of harvest of buccal mucosa, decreased operative time and satisfactory post operative results make it a promising option for augmentation urethroplasty. Methods: Nine patients with long segment anterior urethral strictures (involving penile and/or bulbular urethra and stricture length >4 cm) were included in the study after proper informed consent was obtained. Acellular tissue engineered bovine pericardial patch was used for urethroplasty using dorsal onlay technique. Results: A total of 9 patients underwent Tissue engineered indigenous pericardial patch urethroplasty for long segment urethral strictures, mostly catheter injury induced or associated with Balanitis xerotica obliterans (BVO). Median follow up was 8 months (range 2 – 12 months). Out of 9 patients, 8 (88.9%) were classified as success and 1 (11.1%) was classified as failure. Conclusion: Our study brings a product of tissue engineering, already being used in the cardiovascular surgery domain, into the urological surgery operating room with satisfactory results achieved using standard operating techniques of one stage urethroplasty.

INT 02
Nephroscope assisted insertion and internal fixation of peritoneal dialysis catheter: A novel technique
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Introduction: CAPD is a common modality of dialysis, indicated in patients with poor cardiac vascular status. Catheter tip migration is common. To overcome this, various laparoscopic techniques are described for internal fixation or peritonealisation of the tip. CKD patients with associated comorbidities are unfit for pneumoperitoneum and GA. Conventional technique of open mini-laparotomy, doesn’t require GA, but there is no method to fix the tip under local anaesthesia. Technique: We are describing a novel laparoscopic method wherein we use the nephroscope and amplatz sheath through peritoneal opening for peritoneoscopy. After a para-umbilical incision under local anaesthesia and opening peritoneum, a Nephroscope (Richard wolf – Dresdan 22F) used to do peritoneoscopy under saline irrigation. An amplatz sheath (Cook-26F) probed on the nephroscope. With the help of a specially designed Fusakele’s needle, dialysis catheter tip fixed to anterior abdominal wall. Amplatz sheath removed and peritoneal opening closed. Results: 11 patients (average age 49.1 year, 7 females, 4 males) have been operated under L. A., average follow up of 12.18 months (range 6-18 months). Average time per surgery 39.1 minute (+/-3.91). One patient (9%) developed infective peritonitis after 3 months, resolved after lavage and antibiotic course. No patient reported with catheter tip migration so far. One (9%) catheter removed after renal transplant surgery 6 months after catheter insertion. One patient (9%) died of CCF after 1 year of surgery. Conclusion: With the initial results of the above mentioned technique, it appears feasible, safe and simple without adding extra cost and time required for the surgery.

INT 03
Effect of posterior augmentation of pubourethralis on early continence after robot assisted radical prostatectomy
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Purpose: The idea of posterior augmentation of pubourethralis on early continence after RARP is based on the concept to restore normal anatomy of pubourethralis around the urethra which often gets distorted after RARP. Materials and Methods: In our study we have attempted to study the effect of posterior augmentation of pubourethralis on early continence after RARP. Return of continence was assessed on day of catheter removal, day 1st, day 3, day 7, day 15, day 30, day 90 and day 180. Patients with post operative urinary incontinence were advised to use adult diapers. The number of diapers used per day was recorded till patient became dry. Continence was defined as no or one diaper use per day. Results: Continence was assessed after removal of Foleys catheter on 14th day of surgery as per the protocol of study. Out of total 42 patients, 7 patients (16.6%) were continent on day zero of catheter removal (no pad in 4 patients and one pad per day in 3 patients). On day 3 of catheter removal, 9 patients (21.4%) were continent (no pad in 6 patients) and 23 patients (54.7%) at day 7 were continent (no pad in 10 patients). On day 15, 29 patients (69%) were continent (no pad in 16 patients), while 38 patients (90.4%) were continent at 1 month (no pad in 31 patients and 1 pad in 7 patients). At 3 and 6 months, 41 patients (97.6%) were pad free. One patient (2.3%) has been requiring 2 pads per day at 6 months follow up, and is termed incontinent as per the definition used in this study. He was on catheter preoperatively for incontinence even before the surgery. The median interval for the recovery of continence was 15 days. Complications: Out of 42 patients one patient had ureteric injury which was detected on post operative day 5, patient was managed with antegrade stenting. In another patient ureteric orifice was very close to urethral vesical anastomosis for which uretero neocystostomy was done and one patient had prolonged ileus which was managed conservatively. Conclusion: Although the early results seem to be encouraging but the sample size is small and needs further study with large sample size.

INT 04
Construction and assessment of an innovative indigenous transurethral resection of the prostate simulator
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Introduction: Transurethral resection of the prostate (TURP) is a significant learning curve. Improper approach and techniques may have unwanted postoperative complications. We describe and validated our own, portable, sausage based TURP simulator. Methods: A short anatomical study of urethra, sphincter and prostate was conducted using CT sections and 10 endoscopic videos of TURPs. The simulator frame was designed, patented and constructed using silicon. The frame is designed to accept and allow entry of resection using any technique. Visual assessment by the mentor facilitates training. Evaluation using a 3 step test, GRS score and trainee feedback was analysed using SPSS. Results: 16 urology trainees, 3 experts participated in this single center study. Face and content validity evaluated by experts demonstrated satisfactory replication of the prostate and bladder anatomy. The simulator could differentiate novices from the experts. All subjects demonstrated statistically significant betterment in their GRS scores and total resection time. Parameters of trainees showed a shift, towards the control demonstrating the training capabilities. Subjective simulator assessment indicated high degree of satisfaction on effectiveness. Conclusions: Our portable TURP simulator is the first of its kind. It uses sausages as a substrate for resection using any resection technique. It allows evaluation and supervised, repetitive tailored learning in a controlled, low stress environment. It needs no preparation, has a low initial and no maintenance cost. Further studies would be aimed at further assessment of training and proficiency abilities.

INT 05
Pedicled dartos wrap around technique for prevention of bulbar urethral entrapment in complex pelvic fracture urethral distraction defect repair
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Complex PFUDD is associated with long stricture, failed repair, urinoma and fistulae. The Cornerstone for repair is end to end anastomosis of the urethral ends through perineal or transpubic approach For a successful result all fibrous tissue occupying distraction defect has to be excised. This creates a large dead space along with raw surface on pubic bone on which bulbar urethra is going to rest. This large dead space becomes a potential area for a seroma which can get infected or replaced by fibrous tissue which can entrap the delicate bulbar urethra thereby compromising its vascularity leading to ischemia and failure of urethroplasty. We have coined this terminology of bulbar urethral entrapment (BUET) syndrome to describe this. We also describe our technique to avoid BUET by interposing a pedicled dartos flap between the pubic bone and the bulbar urethra.
Methods: 20 patients of complex PFUDD underwent perineal urethroplasty at our institution from 2013 to 2017. In first 5 cases drain was placed in the unobliterated dead space. In next 15 dartos flap was wrapped around the bulb urethra filling the dead space. Results: 3 out of first 5 cases of had failure and required reoperation. 12 of the subsequent 15 patients are doing well. 3 have obstructive voiding and are being managed by OIU and periodic dilatation. Conclusions: BUE may be an unrecognized cause of failure of repair of complex PFUDD. Wrapping the bulb urethra with a vascularised pedicle graft should become an important tenant in the repair of such cases.

INT 06
Construction and assessment of an innovative indigenous All-Endo-Uro-Sim – A one stop solution for endourology training
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Introduction: Endourology is evolving at fast pace. Simulation based effective endourology training of the trainee at a low cost is the mandate of the day. Aims and Objectives: To provide a one stop solution for endourology training. Materials and Methods: The All-Endo-Uro-sim was designed and manufactured after a brief anatomical study of the human genitourinary system. It consists of a silicone model representing the penis, scrotum, bladder, ureters and pelviccalyceal system. This model was used for endourological procedures such as Cystolithotripsy, ureterolithotripsy and flexible retrograde intrarenal surgery using routine endoscopes and accessories. Evaluation using a 3 step test, GRS score and trainee feedback was analyzed using Spearman rank order correlations and paired t test. Results: There was overall improvement in the pre and post test GRS scores of all the trainees. The procedure time, instrument handling and injuries to the organs showed a statistically significant betterment (Spearman rank order correlations) p<0.001. Face and content validity as evaluated by the experts was satisfactory. Subjective simulator assessment of the trainees indicated a high degree of satisfaction on effectiveness of the simulator. Conclusions: Our portable All-Endo-Uro-sim is a cost effective training model for endourologic training. It uses routine endoscopic instruments and accessories. It is portable and washable. It allows evaluation and supervised repetitive tailored learning in a controlled, low stress environment. The simulator has the potential to be used as a percutaneous trainer which would make it one of its kind; a complete solution for most endourological procedures.

VIJAYAWADA BEST POSTER PRIZE SESSION

VPP 01
A randomised comparative study between laser with suction and shockpulse in management of renal calculi less than 2 centimeters in size
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Introduction and Objective: Energy source does play a vital role in the effective stone clearance in patients undergoing miniperc. Recent addition to the armamentarium of energy sources is the Olympus Shockpulse™. We intend to compare Laser with suction Vs Shockpulse as energy sources in miniperc to manage stones less than 2 cms in size. Methods: Sixty patients with stones less than 2 cm were randomised into two groups; Group 1 – Laser with suction and Group 2 – Shockpulse. Miniperc was performed using 20 – 22 Fr Amplatz sheath and an 18 Fr Storz nephroscope. Laser lithotripsy was performed using EMS laser with suction and Shockpulse lithotripsy was performed using Olympus Shockpulse device. Patient demographics, stone characteristics, intraoperative parameters, and postoperative outcomes were analysed. Results: The baseline patient demographics and stone characteristics were similar in both groups. In laser with suction group, the mean stone size was 21.4 ± 2.63 mm. The average operating time was 45.42 ± 14.79 minutes and average hospital stay was 1.47 days. Average tract size was 20 Fr and stone clearance rate was 100%. In Shockpulse group, the mean stone size was 23.2 ± 2.12 mm. The average operating time was 36.27 ± 11.41 and average hospital stay was 1.56 days. Average tract size was 20 Fr and stone clearance rate was 100%. Conclusion: Both the devices are very efficient. While the laser with suction expedites the process, Olympus Shockpulse is slightly superior with even better vision, faster stone clearance and shorter operative times.

VPP 02
Will retroperitoneoscopy be superior for laparoscopic nephrectomy in patients with decreased pulmonary reserve? Results of a randomized study
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Objective: Raised intrabdominal pressures during laparoscopy challenge the pulmonary reserves of a patient and hence bring a new dimension of concern during anaesthesia as compared to open procedures. Laparoscopic nephrectomy is the most common urological laparoscopic procedure performed and can be equally well performed both trans and retroperitoneoscopically. In this randomized study, we assessed the effect of route of laparoscopic nephrectomy on respiratory system. Materials and Methods: A prospective study was conducted in urology department, from 1st November 2016 to 15th May 2018 randomizing all patients admitted for nephrectomy for benign cause into retroperitoneal and transperitoneal group. Patients with creatinine >1.5, XGPN, GUTB, open surgery on the affected side and early conversion to open (within 1 hour of pneumoperitoneum) were excluded from the study. Intraoperative (duration of insufflation, IAP, urine output, urine flow rate) and PaCO2, EtCO2 were parameters were recorded at 1 hourly interval. Results: On univariate analysis, preoperative and demographic parameters were comparable in both the groups. IAP in transperitoneal group was significant with p value of 0.001. IAP correlation with EtCO2 and PaCO2 was calculated using Spearman correlation coefficient. In transperitoneal group, IAP is positively and significantly correlated to PaCO2 (rho=0.542, p value=0.014) but not in retroperitoneal group the correlation though positive but it is not significant. Conclusion: IAP in transperitoneal group is significantly more than in retroperitoneal group. Also PaCO2 increases significantly as IAP rises in transperitoneal group. Hence retroperitoneoscopy may be a safer procedure in patients with compromised pulmonary reserve.

VPP 03
Percutaneous nephrolithotomy in patients with hemophilia: A tertiary center experience with its perioperative implications
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Introduction: The existence of hemophilia in patients with a urological disease requires a complex course of action. To minimize the risk of hemorrhage, urologists need to manage both preoperative and postoperative periods in conjunction with the hematologist. Materials and Methods: We did a prospective analysis of preoperative and intraoperative measures, postoperative outcomes and safety of PCNL in 6 such patients from January 2015 to January 2018. Patients were operated after thorough preoperative counseling and after confirming the availability of replacement factors. Results: 4 patients were diagnosed cases of hemophilia and 1 patient was detected to have von Willebrand’s disease postoperatively. Macroscopic hematuria was the most common presenting symptom and mean preoperative hemoglobin was 11.2 g/dl. Stone size ranged from 11 mm to 4.2 cm. Substitution therapy was started an hour prior to surgery and was continued for up to 21 days. Mean dilatation of sheath was 22.6 Fr. Average blood loss was 350 ml, with 2 patients requiring blood transfusion. All patients were operated under general anesthesia and were given opioids for pain relief. The patients required intensive care monitoring along with the hematologists. 5 patients had complete clearance, done in a single stage procedure. 2 patients had clots which required bladder clot evacuation and angioplasty respectively. All stones were calcium oxalate and there were no residual calculi on plain CT at 3 months of follow-up. Conclusion:
Considering the morbidity associated with the condition, it is important to consider these patients for a comprehensive metabolic evaluation with serial imaging on follow up.

VPP 04
Individualized management of obliterative urethral stricture in females – Five patients five management strategies
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Introduction and Objectives: Incidence of female urethral stricture ranges from 0.1-1%. Obliterative strictures require individualised treatment depending upon site, length and density of stricture besides associated fistulae, bladder capacity, introital tissue availability and continence. Goal is to achieve urethral patency with preservation/restoration of continence and sexual function. Methods: We describe a series of 5 females with completely obliterative urethral strictures over two years. Data was retrospectively collected on demographics, stricture characteristics, management and outcomes. Results: The average age was 22.2 yrs. The etiology was road accident, stampede injury, railway accident, obstetric trauma and iatrogenic trauma in 1 patient each. All had pre-operative suprapubic catheter (SPC). Stricture site was bladder neck in 2, proximal urethra in 1 and mid-distal urethra in 2 patients. One patient had associated vesico-vaginal fistula and 3 had urethro-vaginal fistulae distal to stricture. The patient with obstetric trauma presented with obstructive uropathy. One patient each was managed with tubed buccal mucosal graft urethroplasty, tubed bladder mucosal graft urethroplasty and modified Tanagho bladder neck reconstruction. One patient underwent continent catherizable pouch formation. Permanent SPC placement with VVF repair was done in one patient in view of very small capacity bladder and chronic kidney disease. At minimum follow-up of 6 months, all patients were continent. No patient required re-do procedure. Conclusion: Female obliterative urethral strictures have heterogenous causes and characteristics. Each patient requires a tailored surgical approach suitting needs, expectations and available options. Detailed anatomic and physiological assessment plays a key role beside vaginal surgical skills of operator.

VPP 05
Future of endourology stone clinic -follow up online: A pilot study comparing virtual and real consultation (out patient) for stone patients follow up visit
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Introduction: Healthcare professionals are among the last, service providers to not use Internet technology to communicate with the people they serve. As much as patients are able to communicate with their doctors, and physicians, medical professionals will also be able to transmit data between each other; overall helping the patients’ well-being. Many a times, it’s very difficult for patients to come from far places for stone clinic for consultation wasting a lot of time. With increased use of mobile phones, Internet and with increased skill of fast communication through handy available cell phone to almost everyone, its possible to use virtual consultation. Uncomplicated stone patients do not need detail clinical examination most of the time. Can we use these advantages in current era in providing health care at every corner of world without compromising quality of care? We could not find literature to address this issue. Aim of our study was to assess feasibility and accuracy of e-consultation in stone clinic and compare with standard consultation defining good practice and inform its implementation in relation to clinician-patient consultations via whatsapp and similar virtual media. Methods: We included 40 uncomplicated stone patients who underwent endourology surgery during Jan 2016 to June 2017 according our inclusion criteria. First we did e-consultation using whatsapp and other virtual media and assessed clinical history, biochemical profile and imaging with images and communicated through media and made a provisional diagnosis and decided management plan. Then we did real consultation as standard practice and decided management plan. We compared diagnosis and management plans in this both consultations virtual and real. We graded in five grades according to difference in diagnosis and management plan. We assessed 5-point likert scale also for virtual and real consultation feedback. Grade Description 1 Minor differences not affecting surgical plan 2 Difference that change in type of procedure 3 Difference that change decision for observation vs. surgery 4 Difference that leads to an additional procedure needed during surgery 5 Difference that result in potentially severe complication. Results: There was no significant difference in diagnosis or management plan in virtual Vs. real consultation. There was grade 1 change in 6 patients, grade 2 and 3 change in 2 & 1 patient. Five point likert scale score difference was not significantly different. Conclusion: Based on this pilot study, virtual consultation (e-consultation) for kidney stone patients is feasible and accurate in selected group of patients without compromising quality of care and may be a future of endourology clinic. However, further study with large number of patients are required to define its role in future.

VPP 06
A warning for diabetes patients on metformin: Check your kidneys for calculi
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Introduction: Metformin, a biguanide drug commonly used to treat type 2 diabetes all over the world. Diabetes patients are more prone to develop kidney stones other than non-diabetics. In the world, overall stone prevalence has doubled since the 2000–2002-time period (1). Metformin (dimethyl biguanide) is an antihyperglycemic agent used in type 2 diabetes. Beyond its action on glycaemic control, metformin exhibits other intrinsic effects that could play a role in prevention against diabetes complications. Some studies thus reported an improvement in the antioxidant status in patients treated with metformin. This might be in part related to its property to limit formation of advanced glycation end products (AGEs) and to decrease the overproduction of free radicals in diabetic subjects (2). Renal cellular exposure to oxalate (Ox) and/or CaOx crystals leads to the production of reactive oxygen species (ROS), development of oxidative stress followed by injury and inflammation. Renal injury and inflammation appear to play a significant role in stone formation (3). Hypothesis for this study indicates that metformin should decrease the number of renal calculi occurring in type 2 diabetes patient. We studied retrospective way to determine the results in 289 type 2 diabetes subjects. So undertaking retrospective study and assess various factors for the kidney stone such as duration of diabetes, history of stone, episodes, emergency room visits required during the time of kidney stone, surgery and any other complications. Materials and Methods: Retrospective analaysis of patients on diabetes mellitus. This study includes the patients of time period from November 2015 to July 2017. Total 419 patients were included in this study. Sample inclusion criteria included patients exclusively on metformin (no other combination of drugs included with metformin) and insulin to other hypoglycaemic, adjuvant drug included), type 2 DM. Whereas exclusion criteria included patients on combination of drugs, Active infection, pregnancy, pediatric age group, metabolic disorders. As we divided patients into two groups group A and group B. Group A patients are those who are taking metformin and Group B patients are those who are on insulin. Then we assessed duration of diabetes mellitus, medical management that either the patient was on metformin or on insulin, history of any kidney stones, episodes, emergency room visits due to kidney stones, surgery for removal of stone and any other complications. Each patient was labelled to have stone in past only by the reports and appropriate history. Results: Metformin Total number of Pts.- 168 Stone 35 (20.83%) Non-metformin Total number of Pts.- 101 Stone 9 (8.9%) Only insulin Pts.- 89 stone 9 (9.9%) Other than insulin Pts.- 12, stone 5 (41.6%) Total number of patients – 269 PRE-DM STONES NO. OF PATIENTS – 17 (8.54%) POST-DM STONES NO. OF PATIENTS-45 (16.70%) Pre-Metformin- 11 patients had stone (6.91%) (168 total no.) Post Metformin- 36 patients had stone (21.42%) (168 total) Discussion There are many studies showing Metformin increasing expression of reactive molecules leading to kidney injury and increases oxidative stress which in turn is the favourable factor for formation of most commonly calcium oxalate stones. but there were no conclusive data available on the humans for this hypothesis. Metformin increases the expression of SOD and TIM-1 in the kidney tissue suggesting increased predisposition to form kidney stones (4). The average age of patients having stone is ≥26 yrs and the predisposition is more in males than females, Ratio is 3:1. The avg. urine Ph of patients having stone ≥5,
VPP 07
Ureteric injury after celiac plexus block: A case report
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Introduction: Celiac plexus block is a pain management modality for chronic pancreatitis patients, and is associated with few complications. Though seven cases of ureteric injury after lumbar sympathetic block have been reported, ureteric injury following Celiac plexus block has never been reported in literature. We present a rare case report of ureteric injury after Celiac plexus block. Methods: An eighteen years old male, known case of chronic pancreatitis, underwent celiac plexus block for pain management. Two months later presented with persistent pain abdomen. On evaluation, CT showed right hydro nephrosis with large well defined retroperitoneal collection. Right retrograde pyelography revealed extravasation of contrast from proximal ureter, for which right percutaneous nephrostomy was performed. Four weeks later nephrostogram showed right upper ureteric stricture approximately 4 cm starting from PUJ. Robotic assisted laparoscopic right uretero-calicostomy plus DJ stenting was done. DJ stent was removed after 2 months. Results: There were no perioperative and postoperative complications. PVP after DJ stent removal showed adequate drainage of contrast across right ureter. At six months follow up, patient is asymptomatic. Conclusion: Ureteric injury after celiac plexus block has not been reported in literature. We report a rare case of ureteric injury and retroperitoneal urinoma after celiac plexus block, successfully managed with initial drainage and subsequent repair.

VPP 08
Prostatic urethral angle correlates with symptom scores and urinary flow rates in men with benign prostatic enlargement
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Objective: To evaluate the impact of the prostatic urethral angle on the International Prostate Symptom Score (IPSS) and the maximum urinary flow rate (Qmax) in patients with benign prostatic enlargement (BPE). Methods: All patients presenting with lower urinary tract symptoms (LUTS) due to benign prostatic enlargement were included. The IPSS was used to evaluate their LUTS. Prostatic volume (PV), prostatic urethral angle (PUA) and the intravesical prostatic protrusion (IPP) were determined using transrectal ultrasonography. Uroflowmetry was performed to measure the Qmax. The correlation between the ultrasound prostate parameters and Qmax and IPP was determined using Pearson’s correlation. Further Regression analysis was done to predict Qmax and IPP using these variables. Results: Total 64 patients (mean age: 62.73 ± 7.61 years) were studied. The PUA had a weak negative correlation with Qmax (r=-0.27, p=0.028). Also, PUA (r=0.44, p=0.0002) moderately correlated and IPP (r=0.29, p=0.02) weakly correlated with the IPSS. Linear regression showed that PUCA could significantly predict Qmax (r=0.833, p<0.0005), IPSS (r=0.48, p=0.001) and voiding IPSS (r=0.54, p=0.001). The mean QUA in patients with moderate and severe IPSS was 49.4o and 52.2o while the mean PUCA in patients with Qmax <10, 10-15 and >15 was 42.2o, 48.3o and 56.1o respectively. Also, a greater PUCA significantly predicted (p<0.0009) failure of medical therapy and requirement of surgery. Conclusion: An increasing PUCA is independently and significantly associated with worsening of the IPSS and decreasing Qmax in men with LUTS due to BPE. Patients with an increased PUCA are more likely to fail medical management and require surgery.

VPP 09
Novel techniques in DVIU using liquid buccal graft and stromovascular fraction – Improving outcomes
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Introduction: DVIU is still the commonest procedure performed for urethral strictures all over the globe. Santucci reviewed the results of DVIU. Success of third DVIU is 9%, CIC after DVIU does not offer cure. Urethroplasty offers stable long-term success rate. There has been a long thought to improve the results of VIU. We present our experience with VIU along with Liquid BMG and VIU with Stomovascular Fraction injection for short bulbur strictures. Materials and Methods: Ours is a tertiary referral center. We have performed 4358 Urethroplasties including 1190 pelvic fracture urethral distraction defects in last 2 decades. 6 patients were selected for Liquid BMG study and 3 for stomovascular Fraction injection after VIU. BMG was harvested and liquefied using mincing, centrifuging at 5000 rpm and then mixed with Glue, injected at site of VIU. In stromovascular fat, liposuction was done, 100 ml of fat was processed with collagenase enzyme, filtered and solution obtained was injected at site of DVIU. Results: 3/6 patients with Liquid BMG are doing well at median follow up of 27 months. These had recurrent strictures after VIU and proximal anastomotic narrowing. 3/6 of these failed posterior urethroplasty and did not do well on VIU as there is no spongiosa in posterior urethroplasty anastomotic site. 3/3 with stromovascular injection are doing well. Conclusion: Advances in VIU will be the future for endourology. Liquid BMG and stromovascular fraction injection after VIU are good techniques, easily reciprocated in any OT and may be the future in short bulbur strictures.

VPP 10
Supravesical urinary diversion with ileal conduit for benign disease: A study assessing its indications, outcomes and its role today
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Introduction: Ileal conduit urinary diversion for benign disease is the last resort for patients with severe LUTS who have not responded to less invasive forms of treatment. Literature covering this topic is sparse and historical. Materials and Methods: 17 patients undergoing ileal conduit urinary diversion for benign disease after all possible options/neglected disease were studied from a single institute from 2014 to 2017. Perioperative data was recorded and outcome measures included patients' operative course, hospital stay, 30-day and 180-day complications using Clavien-Dindo grading scale. Results: The cohort included 12 females and 5 males. Mean age was 47.8 years. Underlying conditions included: rectourethral fistula (1/12), radiation cystitis (4/12), genitourinary tuberculosis (4/12), neurogenic bladder (4/12), complex vesico-vaginal fistula (3/12) and exostrophy bladder (1/12). Patients of neurogenic bladder were significantly younger and had fewer comorbidities. The mean operating time was 3.5 hours (2.5 to 6.5 hrs) and blood loss was 634 ml (350-900 ml). CKD patients underwent a short segment conduit (10 cm). Mean LOS was 10 days (6-19 days). On short-term followup, Clavien grade complications included- I (2/17), II (3/17), III (1/17), V (1/17). On long term followup – bladder spasms (6/17) urethral bleeding (1/17) and pyocystis (3/17). Conclusion: In attempting to “do no harm”, physicians might be reluctant to manage such patients with urinary diversion which could be their only chance at relief. However, it can be morbid and patients should be counseled regarding its risks and benefits and the need for long term follow-up.

VPP 11
Diagnostic role of cognitive MRI-TRUS fusion-targeted prostate biopsy versus conventional TRUS biopsy of the prostate in patients with PSA less than 10 NG/DL
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Introduction and Objective: The purpose of this study was to evaluate the prostate cancer yield rate of cognitive MRI-TRUS fusion-targeted prostate biopsy versus conventional TRUS Biopsy in patients with elevated PSA between 4 to 10 ng/dl. Methods: Our study is a retrospective review of consecutive patients undergoing MP-MRI of the prostate with a subsequent prostate biopsy from Jan 2017 to June 2018. A cohort of men undergoing conventional prostate biopsy was utilized for comparison. The cancer detection rate, tumor location, Gleason score and PSA-related data were compared between both groups. Results: In the total 96 patients were included in this study. 42 patients underwent Cognitive MRI-TRUS fusion-targeted prostate biopsy and 52 patients underwent TRUS guided biopsy. There was no significant difference in demographics and PSA levels among the cohorts. Cancer rate detection rate were similar between the cognitive and TRUS guided groups (9.8 % % vs. 8.5 %). There was no significant difference in final Gleason scores or number of positive cores in both cohorts. Conclusion: Cognitive MRI-TRUS fusion-targeted prostate biopsy seems to have limited role in patients with PSA less than 10 with no previous history of negative biopsy.

VPP 12
Pathological anatomy of spermatic veins in patients with varicocele- long term results from single institute
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Objective: The pathogenesis mechanism through which varicoceles causes testicular dysfunction and subsequent alteration in spermatogenesis, is not completely understood. This study intends to clarify the anatomical and histopathological features of varicoceles veins. Methods: A prospective, observational study involved 62 Patients aged 18–35 years who underwent microsurgical varicocelectomy from May 2015 to April 2018. Testicular hemodynamics was evaluated by color Doppler study. Spermatic veins were obtained from varicocele patients during surgery. The venous anatomical details were evaluated by intraoperative venograms, testicular venous pressure studies, and histopathological findings. Postoperative results of semen analysis, testicular blood flow, and serum testosterone were compared with preoperative values. Results: The spermatic venography showed the precise anatomy of the pampiniform plexus and possible small venous communications with pelvic veins. The transverse sections of the vein show destruction of the intima, intimal endothelium which is with invaginated and thrown in folds. Degeneration of the muscle fibers of the media with the appearance of collagen bundles among them with apparent hypertrophy of muscularis. Conclusions: The hypertrophy of the muscularis explains the high venous pressure in the pampiniform plexus, which correlates with the grade of varicocele. Morphologic changes of the venous wall may lead to impaired venous return which promotes the development of varicocele and its pathogenesis effect on spermatogenesis.

VPP 13
Nerve sparing laparoscopic radical cystoprostatectomy with extracorporeal ileal conduit: Technique, 30 and 90-day complications with early outcomes and sexual function in a series of 15 patients
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Introduction: To describe technique & early outcomes of Nerve Sparing LRC with Extracorporeal IC in a series of 15 patients. Materials and Methods: 15 Patients between April 2017 to March 2018 were enrolled and underwent nerve sparing LRC with extracorporeal IC. Demographic, clinical characteristics, perioperative outcomes, complications, pathological and early oncological outcomes were recorded prospectively. Primary end points were 30 and 90-day complications as per modified Clavien-Dindo grading system. Secondary endpoints were pathological and early oncological outcomes and IIEF-5 scores as return of sexual function. Results: Mean Age and Charlson’s comorbidity index were 59.14 years and 2.51 respectively. Post TURBT Histopathological ranges from Muscle invasive Low Grade transitional cell carcinoma (TCC) to High grade muscle invasive TCC. Clinical stage varies between T2bN0M0 to T4aN2M0 and same has been confirmed after LRC. In all patients, Enhanced recovery after surgery (EARS) protocols were used. Average Hospital stay was 4 to 5 days, 30-day complication rate was 33.3%, in which 4 patients had superficial wound infection (Clavien Grade 1) and 1 died at 6th Post-operative day due sudden uncontrolled Atrial Fibrillation (Clavien Grade 5). 90-day complication rates were same. IIEF-5 score showed mild to moderate Erectile Dysfunction and early oncological outcomes showed no clinical evidence of metastasis at 4 to 6 months follow-up. Conclusion: Nerve Sparing LRC in minimally invasive, safe, feasible, reproducible alternative to conventional open approach in well selected patients in experienced institutions. Early oncological and functional outcomes appear promising to be evaluated further with long term studies.

VPP 14
Are we justified in performing robot assisted radical prostatectomy in men over 75 years of age? Analysis of surgical, oncological and functional outcomes
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Introduction: Management of prostate cancer in elderly age group is still debatable in terms of possibility of robot assisted radical prostatectomy (RARP). Methods: We conducted an outcome analysis of 31 patients aged >75 years undergoing RARP from a cohort of 450 total patients operated by single surgical team in last 7 years. Patients were explained all possible treatment options before subjecting for RARP, ensuring good performance status preoperatively. Results: Median age was 76 years with 74% patients having some comorbidity. Median preoperative serum PSA was 15.25 ng/ml (5.6-61). Nine patients were sexually active but with either mild to moderate erectile dysfunction. Median Gleason grade was 3 with 38.7% patients having >T2 disease on imaging. Median console time and estimated blood loss were 156 minutes (110-300) and 100 cc respectively without any open conversion. Median length of stay and catheter removal day was 2 and 9 days. Median lymph node yield was 18 (6-38) with 70% patients having pathologically T3 disease and 45.2% having N+ disease. Overall margin positivity rate was 40% (16.6% multifocal). 90 day complication rate was 3.25% (Clavien grade 2- minor) without any major complication. Continence recovery was early (<3 months), average and delayed (>1 year) in 30%, 26.6% and 43.3% respectively. At a median follow up of 9 months (1-63), 54% patients did not develop biochemical recurrence till longest follow up with 33% patients requiring an adjuvant treatment. One patient developed metastasis at 44 months, with median overall survival and metastasis free survival being 9 months (1-63). Conclusion: RARP in patients > 75 years is safe with promising surgical, oncological and functional outcomes, which mandates careful patient selection and counselling.

VPP 15
Incidence of male sexual dysfunction in northern India and reasons for non-evaluation in urology clinic
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Introduction and Objective: Male sexual dysfunction includes erectile dysfunction, ejaculation disorders, orgasmic dysfunctions, and disorders of sexual interest/desire. Although current epidemiologic research supports the high prevalence of erectile dysfunction worldwide, incidence data are limited. We wanted to study the incidence of male sexual dysfunction in Northern India and factors which are preventing patients from discussing sexual problems with doctors while in urology clinic. Methods: Any male more than 40 years of age presenting to the urology outpatient clinic from August 2015 to November 2017 as a patient or accompanying person were evaluated based on a set questionnaire. Any person with the previous history of sexual dysfunction in past or present were excluded from the study. Results: We evaluated 1429 patients in the urology outpatient clinic, out of which 1148 proformas were available for final analysis. 28% of Indian male between ages 40 to 67 reported sexual dysfunction. 67 % of people felt it is age-related and has no cure. 88% of patients wanted to discuss sexual problems with doctors. Inability to communicate due to shy nature or taboo (66 %) and lack of privacy (52 %) were other significant factor preventing
patients from discussing sexual problems. Conclusions: With the strong association between sexual dysfunction and impaired quality of life, this problem warrants recognition as a significant public health concern. Most patients regard sexual dysfunction as a normal aging phenomenon with no cure. Patient education about available treatment options will lead to better utilization of health care in such patients.

**VPP 16**

**Creatinine velocity as a novel predictor of progression to end stage renal disease following transurethral valve fulguration in children with posterior urethral valves: A single institution 20-year experience**

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Objective: To analyze the impact of creatinine velocity as a predictor of progression to end stage renal disease (ESRD) following transurethral valve fulguration (TUVF) in children with posterior urethral valves (PUV). Materials and Methods: Retrospective analysis of records of 583 patients who underwent TUVF between January 1992 and May 2013 at our institution was done. Out of these 472 patients with a minimum follow up of 5 years were included in the study. Nadir serum creatinine, following valve ablation and the creatinine velocity for the first five years following valve fulguration, defined as the rise in serum creatinine in mg/dl every 12 months was noted for each patient. The patients were divided into two groups: those who developed ESRD, denoted by start of renal replacement therapy (Group A) and those who did not (Group B). Results: A total of 87 patients (18.4%) developed ESRD at a mean age of 12.51 years (5 – 17). A total of 135 (28.6%) patients had a nadir creatinine > 1 mg/dl, of which 77 were in Group A and 58 were in Group B. The mean nadir creatinine was 1.19 mg/dl in Group A and 0.74 mg/dl in Group B and the mean creatinine velocity was 0.52 mg/dl/year in Group A and 0.13 mg/dl/year in Group B (p=0.001, paired t-test). Using ROC analysis, AUC for nadir creatinine was 0.92 and 0.87 for creatinine velocity, in predicting progression to ESRD. Using a cut off value of 0.27 mg/dl/year for creatinine velocity, the sensitivity and specificity for predicting progression to ESRD was 81.6% and 78.2% respectively. The sensitivity and specificity in predicting progression to ESRD, using a nadir creatinine value of 0.99 mg/dl was 88.5% and 88% respectively. Conclusion: Along with nadir creatinine following valve fulguration, creatinine velocity is a useful predictor of progression to ESRD.

**VPP 17**

**Renal allograft compartment syndrome: an underappreciated cause of early graft dysfunction**

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Introduction: Renal allograft compartment syndrome is a rare cause of early graft dysfunction secondary to retroperitoneal hypertension/ graft compression due to paucity of space in the retroperitoneal compartment. Incidence of this complication which usually occurs in the immediate post transplant period is not well appreciated as there are only few literatures available on the same mostly in the form of case reports. Methods: All renal transplants between January 2012 and July 2017 (n= 656) at our center were reviewed. 8 cases of renal allograft compression syndrome were identified by sudden drop in urine in the immediate post operative period and Doppler showing normal main renal artery flow with poor flow in the segmental and lobar arteries. All cases were explored in the immediate post operative period with a mean time interval of 46 minutes (range – 20 to 120 minutes). All grafts were salvaged on reexploration with the common intraoperative finding of a soft and pale kidney becoming turgid and pink immediately on opening the abdominal wall. The sheaths were closed with multiple relaxing incisions all the while strictly monitoring the urine output. Conclusions: Surgeons must be aware of this complication which may cause rapid deterioration in graft survival and outcome. Strong clinical suspicion and low threshold for re exploration might be helpful to prevent the same and keeping the Foley’s catheter inside the operative field for intraoperative urine output monitoring should be practised regularly.
Introduction and Objective: Percutaneous nephrolithotomy (PCNL) has evolved into widely accepted and primary recommended management for staghorn calculi. Performing PCNL with a small size tract (12–20 F), named mini percutaneous nephrolithotomy (MPCNL), has acceptable low morbidity, with the advent of endourologic instruments, lithotripsy devices, and surgical techniques and may decrease the injury to the kidney and operative morbidity, compared to the standard PCNL with (26–30 F) tracts. The purpose of this study was to evaluate the outcomes of PCNL for patients with staghorn calculi. Methods: Between August 2017 and July 2018, 32 patients with staghorn calculi underwent MPCNL. Data analysis included procedure time, length of hospital stay, number of access tracts, transfusion rates, early and late complications, and stone-free status. Results: Mean patient age was 46.8 years (range 26-75 yrs). The average procedure time was 82 min (60-95 min). All cases needed multiple access tracts (range 2-5). Pneumatic lithotripsy was used in all cases. No patient required blood transfusion and all cases were tubeless with DJ stent placement. Average hospital stay was 2.4 days (2-4 days). There was no significant major complications with multiple tracts. Stone-free rates at the time discharge was 87.5% and 4 cases required ancillary procedures (extracorporeal shockwave lithotripsy) for complete clearance. Conclusions: MPCNL is a safe and effective procedure in the management of staghorn calculi, with outcomes similar to those reported for percutaneous management of smaller volume nonstaghorn stones.

POD 01-03
Assessment and evaluation of preoperative stone scoring systems in predicting the outcomes in percutaneous nephrolithotomy – A single centre, prospective study
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Introduction and Objectives: Many preoperative predictive systems for measuring the outcomes of percutaneous nephrolithotomy have been developed including the Guy’s Stone Score, S.T.O.N.E nephrolithometry score and the CROES nephrolithometric nomogram. We compared the Guy’s Stone Score, S.T.O.N.E nephrolithometry and the CROES nomogram for the ability to predict stone-free status after PCNL and its related complications. Methods: We prospectively studied the patients who underwent PCNL between June 2016 and December 2017 at our institute. We calculated the Guy’s Stone Score, the S.T.O.N.E. nephrolithometry score and the CROES nephrolithometric nomogram score based on preoperative computerized tomography images and post operative results were compared. Results: We evaluated 113 patients in our study. The total post operative stone free rates were 72.56%. On comparing stone-free patients and patients with residual stones, the mean Guy’s Stone Score was 2.04 vs 3.0, the mean S.T.O.N.E. score was 6.8 vs 9.0 and the mean CROES nomogram score was 249.48 vs 174.83 (p < 0.001). The Guy’s Stone Score, S.T.O.N.E. nephrolithometry score and CROES nomogram scores were not associated with stone-free status (p > 0.001). None of the scoring system correlated with complication rates. Conclusions: All scoring systems equally predicted stone free status. S.T.O.N.E score was the easiest to apply clinically. No scoring system was predictive of complication rates. A unified scoring system should be adapted for standard reporting of stone free rates and complications across all the institutions.

POD 01-04
Positive urine culture: Is it a hindrance for doing percutaneous nephrolithotomy? – A comparative study
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Background: Percutaneous Nephrolithotomy (PCNL) has become a widely accepted treatment for renal calculi more than 2 cm in size. Presence of bacteriuria was reported as one of the most important predictors for the development of post-operative complications. But in some patients even after giving culture specific antibiotics, urine culture continues to remain positive. At that timethere is dilemma whether surgery can be done or not. This study was done to answer this question by comparing the treatment outcome and infective complications between renal calculi patients with and without positive urine culture. This was a prospective study. Objective: To compare the incidence of complications as per Clavien-Dindo classification 1. Post-operative fever and need for antibiotics 2. Wound infection 3. Organ dysfunction 4. Sepsis 5. Hospital stay. Patients and Methods: All patients who underwent PCNL with positive urine culture in the Department of Urology from Jan 2017 till June 2018 were enrolled in this study. Patients with positive urine culture were treated with antibiotics for 5 days based upon the sensitivity and urine culture sensitivity was repeated. Patients were taken up for PCNL without waiting for the second culture report after completing 5 days of antibiotic course. Clinical parameters and laboratory parameters were assessed postoperatively. Patients with positive urine culture after treatment were included in group 1 and those with sterile culture were included in group 2. Inclusion and exclusion criteria: Inclusion criteria: (1) All patients who underwent PCNL for renal stones≥2 cm. Exclusion criteria: (1) Patients with pre-operative fever and sepsis who underwent Diversion procedures were not included. (2) Patients with Bladder infection and Diabetes. Statistical Analysis: The data was analysed using SPSS 19. The following statistical methods were used. 1. Comparison using t-test 2. Logistic Regression Analysis and ROC Curves 3. Cross tabulations with Chi-square test. Results: Totally 66 patients were included in the study. 27 patients were grouped into Group 1 (with positive urine culture) and 36 patients were grouped into Group 2 (with sterile culture). There were no Clavien-Dindo grade 3 or 4 complications in both groups. There were no significant differences in bleeding, hospital stay and lab values- PT, INR, Urea and Creatinine (pre and post op) between the two groups. There were no Clavien-Dindo grade 3 or 4 complications in both the groups. Conclusion: Positive urine culture with antibiotic therapy does not make significant difference in outcome of PCNL.

POD 01-05
Does ureteroscopy for upper ureteric calculus need follow up? A prospective observational study
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Ureteroscopy for Upper ureteric calculus is common procedure for upper ureteric calculus. Advances and miniaturization of ureteroscopes and their accessory instruments make modern ureteroscopy quite safe. However, complications of ureteroscopy still do occur and can result in severe ureteral injuries and possible kidney loss. There exists no good evidence to report complications of ureteroscopy. In our institute 115 patients underwent Laser ureteroscopy for upper ureteric calculus in last two years. Ureteroscopy used- 67.5 F Richard Wolf. Laser used - Lumenis 100 Watt. Six patients developed ureteric stricture. Three patients were asymptomatic and three had mild pain abdomen. On evaluation moderate to severe hydroureteronephrosis was found on ultrasonography. All underwent CT IVU and DTPA renogram to localize site of ureteric stricture. Of ureteric stenosis, one patient underwent Laproscopic ureteroureterostomy, one patient underwent Laproscopic ureteroureterostomy, Nephrectomy done in 2 patients and one patient lost in follow up. All these complications developed within six months after ureteroscopy. Incidence of ureteric stricture in our study is 5.2%. In literature incidence of ureteric stricture post ureteroscopy is 7.8 % to 24 %. Factors responsible for ureteric stricture Post Ureteroscopy are mucosal oedema, mucosal injury by laser/ureteroscope/guide wire, longer duration of impacted stone, difficulty in negotiating Ureteroscope. According to this study, ureteral strictures will be formed within 6 months after patients have undergone ureterolithotripsy treatment. So close follow up is necessary in patients who underwent Laser ureerocystoscopy for upper ureteric calculus. Patients should undergo Ultrasonography after 3, 6 months after ureteroscopy.

POD 01-06
Clinical outcomes of retrograde double j stenting of ureter in benign etiology under local anaesthesia – A prospective observational study
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Introduction: The aim of our study is To quantify the outcomes of retrograde double J (DJ) stenting of ureter for benign etiologies under local anaesthesia. To evaluate the causes of failure in retrograde double J stenting by rigid cystoscope. To analyze complications. Methods: 140 patients with indication for emergency urinary diversion were included prospectively. All patients were subjected to ultrasound and non-contrast CT (NCCT) scan of the kidney, ureter and bladder (KUB) region. DJ stenting was done under local anaesthesia (spongiosum block in male). According to success or failure of DJ Stenting, we divided patients into two groups. We compared different etiologies, demographic, biochemical and radiological parameters (Ureteral wall thickness, Ureteric diameter, Hydroureteronephrosis). Intraoperative parameters included patient’s co-operation, pain on visual analogue scale (VAS), fluoroscopy time and duration of procedure. Results: Mean age of patients was 46 years with male to female ratio of 3.2:1, Diabetes Mellitus (19%) was most common co-morbidity and calculi disease (78.5%) was most common etiology. DJ stenting was successfully done in 127 (90.7%) and failed in 13 (9.3%) patients. GUTF patients had 33% failure rate. Patient’s co-operation (p=0.02) passing of contrast beyond obstruction (p=0.001) and low VAS (p=0.009) were only significant factors associated with success. Overall complication rate was 9%. 6 (4.2%) patients needed intensive care, among these 4 (75%) had positive preoperative urine culture. Conclusion: DJ stenting with rigid cystoscope under local anaesthesia (spongiosal block in males) is safe and feasible with 90% success rate. Intraoperative patient’s co-operation, VAS score and RGP findings are main determinant of success.

POD 02-01
Ureteric stent removal by string: Patient satisfaction evaluation
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Ureteric stent (US) causes symptoms in 90% of patients. Removing temporary US as soon as its purpose is achieved gives the best relief of symptoms. Placing a stent with an extraction string eliminates the need for cystoscopy to remove stent. This technique was introduced in our hospital in 2015. We did a prospective study of US cohort with and without extraction string to compare patient satisfaction and complications. Methodology and Results: Between August 2015 and August 2017, 138 patients underwent ureteroscopy stone surgery and temporary US. 58 patients had string attached to the lower end of the stent to aid removal. 80 patients choose to have the stents removed by cystoscopy. Questionnaires were sent to all the patients. 50 patients replied to the questionnaire. 21 (42%) had stents with extraction string. The mean average stent dwell time (days) was 9 with extraction string compared to 38 without extraction string. There was no significant difference in stent symptoms with the patients in both groups (Fisher’s exact test – two tailed - p value equals 0.1485). The Stent dwell time was significantly less in patients with the extraction string. 90% US removal by silk cohort preferred to have the extraction string. 90% US removal by silk cohort preferred to have the string. There was no significant difference in stent symptoms with the patients in both groups (Fisher’s exact test – two tailed - p value equals 0.1485). The Stent dwell time was significantly less in patients with the extraction string. 90% US removal by silk cohort preferred to have the extraction string.

POD 02-02
Evaluation of change of renal function in affected kidney in post percutaneous nephrolithotripsy patient with unilateral renal lithiasis using 99m TC DTPA scan
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Introduction and Objectives: PCNL (percutaneous nephrolithotripsy) is a standard operative technique in nephrolithiasis but it causes renal trauma and alteration of renal function. Earlier few studies have evaluated the effect of standard PCNL on long-term renal function, but studies showing functional changes in the early period is limited. The study was done to evaluate the post PCNL renal function alteration in early post operative period. Methods: The study was done between November 2016 to June 2018 on patients who underwent standard PCNL under GA with up to 24 Fr Amplatz dilatation and nephrostomy insertion without any post op complication, GFR was evaluated with DTPA Renogram at Preoperative period, POD-3 and POD-14. Results: Total 54 patients (Male-34, Female-20) were evaluated finally. Pre op Mean-GFR of affected kidney was 36.70 ml/min & 29.40 for female patients. At POD3 there were reduction of GFR in all patients, 1.78-22 % (p-0.02) in male and 2.38-19.84% (p-0.0001) in female patients compared to pre op value. At POD-14 there were normalization of GFR towards pre op value in 19 male & 10 female patients but persistent low GFR were seen in 15 male (1.9-15.15%, p-0.79) & 10 female patients (0.93-15.53 %, p-0.28), but that were statistically insignificant. Conclusion: In early post op period there were statistically significant reduction of GFR in all patients. It is advised to avoid factors that can bear a negative influence on renal function during the early postoperative period such as nephrotoxic drugs, contrast agents, ESWL and Re-PCNL.

POD 02-03
Mini-percutaneous nephrolithotomy vs retrograde intra-renal surgery – Edge?
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Introduction and Objective: Mini-Percutaneous Nephrolithotomy (MINI-PCNL) and Retrograde Intra-Renal Surgery (RIRS) are 2 treatment modalities for renal stone disease. This study was undertaken to compare and assess the suitability among these two, with respect to our demographic setting, which is characterized by high stone burden, long waiting period and hence loss of working hours for economically challenged population. Methods: A randomized prospective study of patients presenting to our medical centre from September 2017 to April 2018, who were diagnosed with renal-calculi of size 1-2 cm and who underwent alternatively MINI-PCNL (N=20) and RIRS (N=20) were included in our study. Results: MINI-PCNL RIRS Stone-Free-Rate 95% 85% Hospital stay (mean-days) 2 3.5 Operative-time (mean-minutes) 62 83 Blood-transfusion required 5% Nil Procedures 1 2.5. Conclusion: In a limited-resources setup with high patient burden, keeping in mind the socio-economic status of our patients, MINI-PCNL fared better than RIRS, with reduced hospital stay, need for one operative sitting, avoidance of stent related symptoms which decrease quality of life/loss of working hours, lesser need for antibiotic coverage, avoidance of psychological trauma of being subjected to multiple operation-rooms, and at the cost of slight increase in blood loss with potential need for transfusion, as the only factor MINI-PCNL asks for which can be covered up in view of plethora of benefits to patient and health care setup.

POD 02-04
Comparison of safety and efficacy of standard PCNL and mini PCNL via supracostal approach: Does size matter?
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Introduction and Objectives: Complications like bleeding and pulmonary complications are a significant cause of morbidity and mortality in patients undergoing percutaneous nephrolithotomy surgery. Complications rate vary according to different types of approach. The purpose of this study is to compare complications mainly pulmonary and bleeding following standard and mini PCNL done via supracostal approach in a matched cohort of patients. Methods: This is retrospective study of 252 consecutive patients who underwent PCNL surgery from January 2016 to December 2017. Out of these 181 patients which follow the criteria are selected for study and grouped into two group A and group B. Group A includes 138 patients who underwent standard PCNL and group B includes 44 who underwent mini PCNL. Results: Overall eight (4.42%) patients had pulmonary complications following PCNL. Among these 6 patients belonged to group A, 2 had pneumothorax and 4 had pulmonary effusion. 2 patients belonged to group B, 1 had pneumothorax and 1 had pleural effusion. Other complications like bleeding and stone clearance rate were comparable in both groups of patients. Conclusions: Based on this study
Introduction: We hypothesize that the ATOMS system is superior in the cure rate with lower complication rate in the low to moderate incontinent patients. Methods: From April 2009 till June 2018 we have treated 420 men with low to moderate urinary incontinence (1 to 4 pads, 50 to 350 ml/day) after radical prostatectomy with the ATOMS device and from 2015 till 2017 34 men with an artificial urinary sphincter (ZSI 375). All devices were implanted by a single surgeon and the follow up of the ATOMS device was up to 9 years and the follow up of the sphincter up to 3 years. Results: The revision or removal rate in the ATOMS population was 5% (n=21) in 9 years, the revision or removal rate in the Sphincter population was 97% in 3 years. There was 0% Erosion rate in the ATOMS cohort, 76% Erosion rate in the sphincter cohort. In the low to moderate incontinent patients (1 to 4 pads per day or 50 to 350 ml/24 h) the success rate with the ATOMS device was 80% (n=366) dryness rate (0 pads), 95% (n=399) overall success rate in 5 years (up to 1 pad/day). In the sphincter group the success rate was 80% (n=27, 0 pads) and 3% (n=1) overall success rate in 3 years (up to 1 pad/day). Conclusion: The ATOMS system was safe and showed a high success rate, the complications were low over a max follow up time of 9 years. The sphincter ZSI 375 was safe to implant but this device showed a high amount of erosions which are a severe complication in the treatment of stress urinary incontinence in men. So we were able to show that in low to moderate incontinent patients the ATOMS device is superior in comparison to the artificial urinary sphincter and should be considered as a gold standard in the treatment of post-prostatectomy incontinence.

POD 03-03
Prospective evaluation of ejaculatory function in patients undergoing urethroplasty using a validated questionnaire

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Introduction and Objective: Ejaculatory dysfunction and urethral stricture disease run hand in hand. Sexual morbidity is significant in determining overall satisfaction after urethral reconstructive surgery. We present the data of our prospective study that had an objective to examine the effects of urethroplasty on ejaculatory function using a validated questionnaire. Materials and Methods: The study included all adult male patients who underwent urethroplasty from November 2016 to June 2018 at our institute. We were asked to fill the male sexual health questionnaire – ejaculatory function domain (MSHQ-EjD) with 7 questions and IIEF-5 pre-operatively, at 6 months post surgery and at 1 year. Along with that we also used a visual analog scale to assess pain during ejaculation. Results: Out of the seven domains of MSHQ-EjD, painful ejaculation was present consistently in the study population. There was statistically significant improvement in MSHQ-EjD after the surgery both at 6 and 12 months after surgery. The ejaculatory function post surgery was statistically same as it was before the patient had symptoms of his urethral stricture disease. There was statistically significant improvement in visual analogue scale for ejaculatory pain after surgery. The IIEF-5 score was overall decreased after urethroplasty. Conclusion: Ejaculatory function is an important aspect of post urethroplasty success and satisfaction. The ejaculatory function of patients is restored to pre-disease levels in patients after successful urethroplasty. The most striking improvement is in ejaculatory pain.

POD 03-04
Evaluation of proliferating cell nuclear antigen expression in development of renal cell carcinoma in Indian patients

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Introduction: Renal cell carcinoma (RCC) accounts for approximately 2% of all cancers. Proliferating cell nuclear antigen (PCNA) is a DNA clamp that acts as a proessivity factor. DNA polymerase ε in eukaryotes is essential for replication. Methods: Patients of Renal Cell Carcinoma (RCC) who have been operated at our department were taken for the study. Total number of patients taken for our study was 32. Renal cancer patients who received radiotherapy, chemotherapy etc. before operation and benign tumours of the kidney in histopathological examination were excluded from the study. Histopathological examination of the Renal Mass...
and Immunohistochemistry (IHC) of samples from renal mass as well as of samples from normal renal tissue for detection of expression of PCNA were done. Results: In normal tissues 4.5% of cells showed PCNA expression in nucleus and proliferating cells were found to be mainly tubular epithelium. Significantly increased proliferation was evident in Clear Cell RCC samples (48%) and other subtypes (57%-66%) throughout the lesions compared to the normal. Interestingly, significantly increased proliferation was seen in Stage 1 (36%) followed by gradual increase in Stage T2 (52%) and Stage T3 (69%), indicating its clinical importance with progression of the tumour. Conclusion: Our data showed that expression profile of PCNA has got clinical importance in development of RCC irrespective of different subtypes. This might have implication in diagnosis and probably prognosis of the disease.

POD 03-04
Outcomes of Chennai enhanced recovery protocol after major urological surgery
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Introduction: Enhanced recovery after surgery (ERAS) protocol has traditionally been followed in colorectal surgery. Convincing evidence to advocate tissue sparing of these protocols in major urological surgery however is currently lacking except radical cystectomy. But urology domain includes several other major surgeries which have potential to be benefited by ERAS protocol. This project aimed to study a specially designed ERAS methodology in patients undergoing major urological non-cystectomy surgery. Materials and Methods: This study was conducted in prospective fashion on patients undergoing major urological procedure like Nephrectomy, Prostatectomy etc via any access [Open or Minimal Invasive (Laparoscopy or Robotic)]. The multidisciplinary team was formed, led by Surgeon to implement multimodal rehabilitation regime (non-opioid analgesia, enforced mobilisation, early feeding and early discharge). The study was carried out from August 2016 – August 2017. The perioperative outcomes were compared in open vs minimal invasive groups using non-parametric tests. Results: A total 70 patients underwent major urological non-cystectomy surgery during the said duration [Open (n=11), Minimal Invasive (n=59)]. There was no significant difference in Pain Score (p=0.114), Ambulation (p=0.298), Bowel Activity (p=0.0716) and Resumption to Oral Diet (p=0.091) in both the groups. The mean length of stay in both group was similar (p=0.187) and also no difference in complications (p=0.78) and readmission rates (p=0.74). Conclusion: Our specially designed ERAS pathway suggests that with optimized pain relief, enforced mobilisation and early oral nutrition results early recovery and early discharge with very less complication rates irrespective of technique used for surgery. This ERAS pathway not only cut costs but also there is minimal interruption of physiology with the best rehabilitation of patients.

POD 03-05
Heparinised alkaline lidocaine: Intravesical therapy for interstitial cystitis
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Objectives: To test the efficacy of a new intravesical therapeutic solution in relieving urgency/frequency and pain in interstitial cystitis (IC). Methods: 30 patients of Interstitial Cystitis not responding to oral medications (Pentosan and Amitryptiline) were randomized into 2 groups of 15 each with group 1 receiving a cocktail solution of 40,000 Units heparin in 20 ml distilled water, 8 mL of 1% lidocaine (80 mg) and 4 mL of 8.4% sodium bicarbonate administered intravesically and group 2 receiving Normal Saline. The response to treatment was evaluated within 20 minutes of instillation in all patients and after 24 to 48 hours. Significant symptom relief (defined as 50% or greater symptom improvement) was observed in both groups. Results: After one instillation, 7 (46.67 %) of 15 patients in group 1 (1% lidocaine) and 6 (66.67%) of 15 in group 2 (Normal Saline) reported significant immediate symptom relief. The difference in the response rates was statistically significant (P<0.01). Conclusions: Intravesical treatment with combined heparin and alkalized lidocaine immediately reduced the pain and urgency of IC in most patients. Symptom relief lasted beyond the duration of the local anesthetic activity of lidocaine, suggesting the solution suppresses neurologic upregulation.

POD 04-01
Dorsal plus ventral buccal graft urethroplasty using dorsal approach – A modified technique
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Introduction and Objective: Oral mucosa is considered the gold standard substitute for graft urethroplasty and its placement as dorsal or ventral urethrotomy approach has become contentious issue. Palminteri (2008) described dorsal plus ventral graft (DVG) by using ventral approach for tight bulbular urethra strictures. Our objective is to present a modified technique of managing these strictures by dorsal approach for DVG to overcome the problem of less working space and graft buckling. Methods: From January 2014 to December 2017, a total of 24 patients underwent urethroplasty for tight urethral strictures by using this technique. Mean age was 40 years (19-60 years). Out of 24 cases, 14 were infective and 10 were of unknown etiology. Retrograde urethrogram and urethroscopy was done preoperatively. Ability to perform urethroscopy with 6 Fr ureteroscope was our criteria to choose patient for combined DVG approach. Stricture urethra was opened up dorsally for graft placement Ventral inlay graft- first buccal graft is placed ventrally over spongiosa after excising scar tissue Dorsal onlay graft- 2nd buccal graft is placed dorsally over cavernosa and suturing it to the urethral margin over silicon catheter followed by SPC placement. Results: Average stricture length was 4 cm (2-6 cm). Of these 24 cases 20 (83.3%) were successful and 4 (16.7%) were treatment failures with re-stricture which was managed by OIU. Conclusions: DVG placement using our technique (ventral inlay + dorsal inlay) is reliable procedure for single stage reconstruction of tight bulbular urethral strictures and this technique provides wide working space, less buckling of ventral graft, decrease incidence of bleeding intraoperatively.

POD 04-02
Risk factors for recurrence after buccal mucosal graft urethroplasty: A study in tertiary care hospital in Kolkata
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Background: The aim of this study is to determine risk factors for stricture recurrence and complications in patients having buccal mucosal graft (BMG) urethroplasty for anterior urethral stricture. Methods: We conducted a retrospective review of a prospectively gathered database of 56 patients undergoing various forms of BMG urethroplasty between 2015 and 2017. Risk factors studied were: patient profile, aetiology, stricture length, location, previous urethral surgeries, and patient compliance with CISC in postoperative period. Results: The mean age of patients - 42.8 years. Average follow-up - 11 months. The total re-stricture rate - 19.6% (11 patients). Postoperative complications were reported in 12.5% (7 patients). The most frequent complications recorded were urinary fistula (2 patients), graft contracture (2 patients) and graft failure (3 patients). Complications were more common in strictures of length more than 8 cm (8 patients). Another factor for recurrence was presence of previous BJO changes (6 patients). Stricture with more proximal location (bulbar urethra) had more chances of recurrence. Previous h/o of urethral surgeries predisposed these patients to recurrence. Patients not doing CISC properly in follow-up had greater recurrence. Co morbidities like diabetes; heart disease did not affect recurrence. Conclusion: BMG urethroplasty represents a reliable therapeutic option for patient with urethral strictures with a good success rate. Complications and recurrence are more common in patients with long strictures, more proximally located, those with BJO changes, previous h/o of urethral surgeries. Another group of patients in whom recurrence occurred were those not doing CISC properly.
**POD 04-03**

**Role of MRI in post traumatic posterior urethral distraction defects in comparison to RGU/MCUG**

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Introduction and Objectives: Pelvic fracture urethral injuries were assessed using RGU and MCUG. MR urethrogram is indicated to look for stricture and urethral distraction defects. We aimed compare MRU with RGU/ MCUG with the surgical findings of PFUI's. Methods: RGU, MCUG and MRU was done on 20 male patients presenting between 2016 and 2018 with PFUI and evaluated prospectively. Preoperative Surgical planning was done on findings based on conventional RGU and MCUG and MRU. Delayed stricture repair managed by stricture excision and anastomosis. RGU/MCUG and MRU findings were compared intraoperatively with the length of urethral defect and lateral displacement. Results: 50% patients were between 21-30 years of age. There was a difference of 0.3-1.1 cm in the urethral gap measurement between RGU and MCUG compared to MRU intraoperatively. RGU and MCUG did not provide accurate determination of the urethral defect length and extent of fibrosis of the corpora spongiosa or prostatic displacement. Stricture length assessment and prostatic distraction was better demonstrated on MRU. Preoperative findings of MRU, 4 patients underwent inferior pubectomy as a part of urethroplasty. Correlation between surgical measurements of strictures showed a stronger linear relationship with MRU than between RGU, MCUG. Conclusion: RGU/MCUG cannot accurately determine the defect length, fibrosis, prostatic displacement because of poor prostatic urethral filling. All patients had more accurate in assessing obliterator urethral strictures, extensive scar tissue as compared to RGU/MCUG and helps in planning surgical approach. MRI could easily predict the need for pubectomy in preoperative evaluation.

**POD 04-04**

**Use of Yang-Monti modification of ileal ureter replacement for long segment urethric strictures: Our experience**

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Introduction: Ileal replacement of ureter has been an accepted form of treatment for long segment urethric strictures. The Yang-Monti modification of simple ileal ureter replacement allows for the creation of a long tube from short bowel segment after its reconstruction. In this study, we evaluate its safety, surgical outcome and impact on renal function based on our experience in our centre. Materials and Methods: We had 4 patients with long segment urethric strictures who underwent ileal ureter replacement using the Yang-Monti principle. 3 patients had long segment strictures as sequelae to Genitourinary TB. 1 patient had ureteric stricture following URS with Laser for a right PUJ calculus. Patients were kept on close follow up after the surgery. Results: No intra-operative or postoperative mortality or significant complications occurred. Patency of the interposed segment was assessed with Antegrade Nephrostogram through Per Cutaneous Nephrostomy (PCN) at 3 weeks, post-operatively. One of the Tuberculous patient had a leak near the cysto- ileal anastomotic junction and PCN was retained for 2 weeks more. Leak eventually settled and PCN and DJ stent were removed. Other patient had good flow of contrast and PCN and DJ stent were removed. All patients had improved renal function without any evidence of urinary obstruction. Longest followed patient of 7 years showed no strictures. Conclusions: The Yang-Monti modification for ureteric substitution is a safe technique with an excellent outcome. A short segment of ileum can be used to replace a large ureteric stricture/defect and offers a durable preservation of renal function without urinary obstruction.

**POD 04-05**

**Intraoperative endoscopic assessment in pelvic fracture urethral distraction defect repair: A case series**

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Introduction: Posterior urethral strictures are difficult cases to treat. Anastomatic open urethroplasty is major treatment option, and various manipulations to the procedure have been recommended. Perfect Surgical technique has big role to play as treatment of recurrence is considered difficult. Objective: Assess role of two dimensional diagnostic imaging (RGU/MCU) and endoscopic assessment in management of PFUDD. Materials and Methods: 23 perineal urethroplasties combined with intra-operative antegrade and retrograde cystoscopy were performed in 23 male patients between 2014 and 2018. Pre-and peri-operative records were evaluated, with a particular focus on RGU/MCU, and cystoscopy findings. Results: The mean stricture length was 2.6 cm. In 7 cases the preoperative RGU had under diagnosed the length which affected our treatment plan. In one case fistula opening was identified during cystoscopy, it was missed by RGU and in other patient initially hay groove dilator was used as tract guide but it created a false tract which was rectified on table with aid of cystoscopy. In 18 cases with normal bladder necks, the anastomosis was created under the guidance of antegrade and retrograde cystoscopy. In 5 cases, stiff guide wires were used in addition to endoscopic light for correct anastomosis. The overall success rate was 90 %. Conclusion: Antegrade and retrograde cystoscopy are an easy-to-perform adjunctive modalities in perineal urethroplasty. It provides benefits of supplementary endoscopic findings and feasibility of certain manoeuvres that facilitate debridement and anastomosis formation. It also overcomes limitations of RGU/MCU, previous manoeuvres of tract identification and thus decreasing percentage of complications.

**POD 04-06**

**Technical issues in upper polar heminephrectomy in duplex kidney: Our experience with 15 cases**

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Introduction and Objectives: Upper polar heminephrectomy is a complex procedure with none the less complications either done laparoscopically or open, but some modification of procedures may prevent complications. We present our experience with 15 cases of duplex anomalies with poorly functioning upper pole emphasizing on techniques we practice. Methods: Between 2015 to 2018 at our institute around 15 patients with duplex system anomalies with flank pain, recurrent UTI or with incontinence underwent open or laparoscopic heminephrectomy after evaluation. We approached superiorly from upper moiety instead of dissecting directly over the ureter. Argon plasma coagulation knife or hydrojet was used for aiding the line of dissection. Surgical complications, operative time with loss or late complications were registered. Follow up DTPA scan was done in all patients at 3 months of surgery. Results: Mean operative time for laparoscopic surgery was less than open surgery. No major intraoperative or post operative complications observed except one case of urinary leak who was managed with selective angioembolisation. Mean hospital stay and comorbidities for laparoscopic surgery was less. Follow up DTPA scan showed normal function of the lower moiety and the opposite kidney. 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, starting dissection around the upper pole instead of directly over the ureter and identifying vessels carefully can save the patient from disastrous complications like urine leak, hemorrhage and atrophy of the remaining moiety.

**POD 05-01**

**Gata3 expression pattern in patients with non-muscle invasive urothelial carcinoma of the bladder**

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Introduction: GATA3, a major transcription factor, plays a pivotal role in differentiation of breast epithelia, urothelium and varied subsets of...
T-Lymphocytes. GATA3 expression is considered to be a potential marker in urothelial cancer, urethral and parathyroid malignancies. The aim of this study is to determine the significance of GATA3 in non-muscle invasive bladder cancers (NMIBC), to correlate its expression to the grade and stage of tumour and also to assess its association with recurrent lesions in patients with NMIBC. Materials and Methods: A prospective study on 40 consecutive patients was conducted from December 2016 – December 2017. All patients with non-muscle invasive bladder cancer were included. Patients with muscle-invasiveness and urethral and prostate involvement and metastasis were excluded from the study. Results: Of the 40 patients studied, 29 of them were of high grade and 17 had recurrent tumours. Of the 11 patients with low grade lesion, none of them were GATA negative, suggesting that GATA3 positivity strongly correlates with lower grade lesions. Of the 17 patients with recurrent tumours, 11 (65%) were GATA3 negative. On the other hand, none of those patients who had no recurrence were GATA3 negative, suggesting that GATA3 under-expression strongly correlates with aggressiveness of the tumour. Conclusions: GATA3 appears to be directly correlating with biological behaviour of the cancer. Loss of GATA3 is associated with higher grade and higher recurrence rate of the tumour. This marker might help the clinicians to prognosticate the long term behaviour of urothelial malignancies.

POD 05-02
Significance of mini chromosome maintenance complex 10 overexpression in non-muscle invasive bladder tumor
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Introduction and Objectives: Urinary Bladder cancer is the 9th most common cancer worldwide and 13th most common cause of death. The molecular pathogenesis of urothelial carcinoma has not been fully elucidated. Li-Win et al. identified Minichromosome maintenance complex component 2 (MCM2) and MCM10 as the two most significantly up regulated gene in urothelial cancer among MCM gene family. Managing patients with T1 disease poses problem because of high recurrence and progression. Our objective is to predict recurrence and progression in those T1 patients who are at risk of those T1 patients who are at risk of recurrence and progression. Methods: Total 20 patients with NMIBC were taken. MCM10 Immunohistochemistry was done. Results were interpreted as Positive or Negative. Patients were followed up for minimum period of 12 months. We compared MCM10 positivity in Ta and T1 disease; recurrence and progression in MCM10 positive and negative cases. Pearson’s X2 test was used to analyze data. Results: 35.71% (9/26) of T1 patients were MCM10 positive, whereas none of T1 patients had positive result. 35% of patients with T1 disease had recurrence; among them 80% patients were MCM10 positive, whereas only 11% IHC negative T1 patients had recurrence. (P = 0.0230) 21.42% of T1 patients progressed to higher stage. MCM10 positive patients had 60% progression rate, compared to nil in negative group. (P = 0.0275).

Conclusions: MCM10 can be a vital immunohistochemistry in patients with NMIBC to predict recurrence and progression of disease. Scope of aggressive management of MCM10 positive NMIBC patients should be reviewed to give a better disease specific survival.

POD 05-03
Significant impact of Apo lipoprotein A1 genetic polymorphic sequence variation and its relative expression in patients with bladder cancer
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Introduction: Apo-A1, a constitutive anti-inflammatory factor, is a potential biomarker due its variable concentration in blood in different types of cancers. We evaluated the association of the APOA1 -75 G/A and -83 C/T polymorphisms in patients with bladder cancer. APOA1 protein expression was examined in urine samples to find our relationship between differentially expressed urinary proteins and variation in APOA1 -75 G/A and -83 C/T polymorphism. Methods: Confirmed 90 bladder tumor samples and 100 healthy controls were included in this case-control study. Genotyping of the APOA1 was performed by PCR-RFLP and expression of APOA1 protein in the urine of patients with bladder cancer was done by ELISA. Results: Patients with bladder ca were associated with APOA1 -75 AA genotype (nearly 4 fold risk) and APOA1 -75 A allele (p<0.05). APOA1 -83 CT heterozygotes showed inverse relation with bladder tumours (p<0.05). Higher expression of urinary APOA1 protein (≥20 ng) of bladder ca patients was observed in APOA1 1-75 AA genotype. Pattern of urinary APOA1 concentration in low-grade tumors were 52.5% i.e high (≥20 ng) as against 15.4% in higher grades. 84.6% high-grade cases had APOA1 protein concentration (<20 ng/ml) versus 47.6% low-grade cases (O.R= 6.08 and p<0.01). Conclusion: APOA1 protein expression can serve as a diagnostic marker for more malignant bladder tumors and its sequence variation APOA1 1-75AA can act as a marker for risk assessment of the disease. Since this a first study from the world, our results need to be further investigated in large series of samples to authenticate the status of this gene.

POD 05-04
Oncosurgical status and continence in radical perineal prostatectomy: Outcome in 25 cases
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Introduction: Radical retropubic prostatectomy (RRP) is the standard surgical procedure for localized prostate cancer in appropriate patients. In recent years, radical perineal prostatectomy (RPP) has regained interest due to various unique advantages. Objective: To evaluate post surgical margin status, serum prostate specific antigen (PSA) and continence in RPP patients. Materials and Methods: We analyzed post surgical margin status, serum PSA and continence data from 25 patients with localized prostate cancer undergone RPP between 2015-2017. Continence was assessed on the day of catheter removal, at the end of 1st, 3rd, 6th month and 1 year. Results: 4 (16%) patients had positive surgical margins, 1 (4%) positive bladder margin, 1 (4%) positive urethral margin and 2 (8%) with extraprostatic extension. At 1 and 6 month, same 7 (28%) had persistent detectable serum PSA (>0.01 ng/ml). On removal of catheter, 5 (20%), 13 (52%) and 7 (28%) had grade 1, 2 and 3 incontinence respectively. At 1 month, 10 (40%), 7 (28%) and 1 (4%) had grade 1, 2 and 3 incontinence respectively. At 3 month, 7 (28%), 1 (4%) and 1 (4%) patients had grade 1, 2 and 3 incontinence respectively. At 6 months, 1 (4%) had grade 1 and other 1 (4%) had grade 3 incontinence. At 1 year, 1 (4.34%) had grade 3 incontinence, rest 22 (95.65%) were continent, while 2 patients lost followup. Conclusion: This study outlines the post surgical margin status, serum PSA and urinary continence. Most patients gained urinary continence within 6 months. RPP is an excellent alternative to robotic and laparoscopic prostatectomy resulting in good oncosurgical outcome and early functional recovery.

POD 05-05
Liquid based cytology and immunocytochemical detection of minichromosome maintenance protein-2 as potential marker in bladder cancer
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Introduction: Urinary cytology and biomarkers have been investigated for diagnosis and follow up of bladder cancer, but none has achieved desirable acceptability. In search of improved method of detection of urinary malignant cells and biomarkers, LBC (liquid-based preparation of cytopathology slide) and MCM2 (cell cycle regulatory protein) were investigated. Early results are promising. So, we conducted study to investigate the status of LBC and MCM2. Objective: To know the impact of LBC in comparison to conventional cytology and correlation of detected urinary MCM 2 protein with biopsy, obtained by TURBT/TUR biopsy. Methods: 100 cases (known admitted patients of bladder SOL) and 100 control patients (not having urothelial malignancy) were recruited. 2 freshly voided 50 ml urine were collected and examined for conventional urinary cytology, LBC and immunocytochemical analysis of MCM2 protein. Biopsy reports were also recorded. Results: LBC detection of malignant cells were more in bladder cancer as compared to conventional cytology (32 vs 23; p value <0.05) and were better in background of haematuria during evaluation (20 vs 12 out of 42 patients; p value< 0.05). Both are significantly positive in High grade bladder SOL (28 vs 21 out of 38 high grade bladder cancer). Cut off value 50- MCM2 positive cells/hpf showed 89 % positivity (Vs 3% control) while 200 cut off value showed...
81% positivity without any false positive. Conclusion: LBC offers better detection of malignant cells specially in background of haematuria. MCM2 has promising role in detection of bladder cancer.

**POD 05-06**

Role of preoperative neutrophil lymphocyte ratio as a marker in predicting lamina propria invasion recurrence and progression in non muscle invasive bladder cancer


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Introduction and Objectives: Recently published data have revealed that an elevated NLR is an independent predictor of disease progression and recurrence in patients with NMIBC. The aim of the current study was to evaluate whether preoperatively measurement of NLR can predict lamina propria invasion, recurrence and progression in patients with NMIBC. Materials and Methods: The medical records of 223 consecutive patients who underwent TURBT and were diagnosed with non-muscle-invasive bladder cancer from 2007 to 2012 were analyzed; the patients were divided into two groups according to the pathological stage (Group 1: Ta, Group 2: T1). NLR was calculated by dividing the absolute neutrophil count (N) by the absolute lymphocyte count (L). Results: The mean NLR was 2.0 +/- 0.58 in Group A (Ta) vs 2.9 +/- 0.68 in Group B (T1) (p < 0.001). NLR of >2 was associated with 152 (90.4%) cases of T1 & 21 (27.3%) cases of Ta & NLR of <2 was associated with 56 (72.9%) cases of Ta & 14 (9.6%) cases of T1 (p < 0.001). NLR >3 was associated with 95 (70.9%) cases of recurrence vs 45 (50.6%) cases of recurrence in NLR of <3 (p < 0.002). A NLR >3 associated with 42 (31.3%) cases of progression vs 14 (15.7%) in NLR <3 (p < 0.001). Conclusion: Pretreatment measurement of NLR can predict the lamina propria invasion (NLR>2) recurrence and progression (NLR>3) in patients with NMIBC. Prospective studies are now required to further validate the role of NLR as a risk factor in NMIBC.

**POD 06-02**

Significance of serum total testosterone to total prostate specific antigen ratio in prostate cancer diagnosis: A study in north-eastern India

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Introduction: The lifetime risk of prostate cancer (PCa) is around one-in-seven and is the most common malignancy in men. Few recent pieces of research have investigated serum testosterone/PSA (T/PSA) as a biomarker, which can be used alternatively to free PSA. Aim and Objective: We investigated whether total serum testosterone and testosterone/total prostate-specific antigen ratio (T/PSA) might be used PCs biomarkers. Materials and Methods: We prospectively studied 71 patients with benign prostatic hyperplasia (BPH) and 73 patients of PCa treated during January 2016 – December 2017. Serum total testosterone, total PSA and T/PSA ratio of BPH and PCa patients were analysed. Results and Observations: Compared with the BPH group, the PCa group had higher PSA (25.02 vs. 3.88) and lower T/PSA (1.67 vs. 5.89) (all p < 0.001). Patients with PCa and PSA ≤20 ng/ml had higher testosterone (17.16 vs. 15.06; p = 0.032) and higher T/PSA ratio (2.74 vs. 0.44; p < 0.001) than those with PSA >20 ng/ml. Patients with PCa and Gleason score <7 had higher testosterone (18.03 vs. 13.94; p < 0.001) and T/PSA (2.68 vs. 0.44; p < 0.001) than those with Gleason score >7. In patients with PSA ≤20 ng/ml, T/PSA was higher in those with BPH than in those with PCa (5.89 vs. 2.74; p < 0.001). ROC curve analysis yielded an AUC of 0.873; for the optimal cut-off of 3.89, with sensitivity of 91.8% and specificity of 52.1%. Conclusion: T/PSA ratio may have a role in improving the accuracy of differentiating PCs from BPH in patients with PSA >20 ng/ml. Keywords: Benign prostatic hyperplasia, prostate cancer, serum total testosterone to total PSA ratio.
Introduction: To evaluate the long term outcomes of nephrectomy and inferior venacava thrombectomy in patients with advanced renal cell carcinoma in a single tertiary care centre. Materials and Methods: We retrospectively collected data of 30 patients who underwent Nephrectomy and venacava thrombectomy from Jan 2005 to Dec 2017. All the patients underwent surgery through abdominal approach (n=27) and thoracoabdominal approach (n=3). The outcomes of surgery such as cancer specific survival, Progression free survival and 90 day post operative complications were studied. The prognostic factors are also analysed. Results: The median age group was 57 years. At presentation majority (59.4%) of the patients have Level II (n=18) thrombus. 9 patients (30%) had mets at time of presentation. The patients with Level IV thrombus (n=3) underwent IVC exploration with Cardiopulmonary Bypass and deep hypothermic cardiac arrest. Involvement of IVC was seen in 5 patient and graft was used to reconstruct the IVC. Post OP mortality was 6% (n=2). 6% (n=2) had significant post op morbidity (Clavien Dindo -2). The median follow up was 24 months. Cancer specific survival at 5 years was 39%. The 5 year CSS of patients with metastasis was 6% and inbub group without metastasis was 59%. On Multivariate analysis grade of the tumour, presence of metastasis and lymphnode were the independent prognostic factors. Level of tumour has no statistical influence on the survival. Results: Surgery maintains the main modality of the treatment in RCC with IVC thrombus. This offers a reasonable long term survival in patients without metastasis. Again the metastasis and grade of the disease determines the prognosis rather than the level of the thrombus.

POD 06-05
Biochemical failure after radical prostatectomy in high risk carcinoma prostate and its co-relation to the number of risk factors
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Introduction: We analyzed the biochemical recurrence free survival of patients with high-risk prostate cancer (HRCaP) as per D’Amico classification undergoing radical prostatectomy at our center. We aimed to determine whether the number and type of risk factors (cT2c-T3b, PSA >20 ng/ml, Gleason score (GS) > 7) are associated with biochemical recurrence in HRCaP patients undergoing radical prostatectomy (RP) in Indian population. Methods: Between 2006 and 2017, 192 patients underwent radical prostatectomy (open, laparoscopic and robotic) at our center, of which 109 had D’Amico high-risk disease. Preoperative, post-operative and pathological outcome data were analyzed for patients with HR disease as per D’Amico classification. Subgroups were formed to determine whether an increasing number of risk factors (1, 2 or 3) were associated with poorer oncological outcome data. The Kaplan-Meier method and Log Rank test was used to test the difference in biochemical recurrence free survival between the groups. Univariate and multivariate analysis was done to find significant variable against BCR. Results: According to the D’Amico criteria, 109 patients had high risk, 63 patients had intermediate risk and 19 patients had low risk disease. These 109 patients with high-risk disease were analyzed in our study (50 robotic, 33 open, 26 laparoscopic). 59 patients (54.1%) had one high risk factor (1HR), 44 (40%) had two high risk factors (2HR) and 6 (5.5%) had three high risk factors (3HR). The mean follow up for our patient population was 21.5±19 months (median 18 months, range 0-108). Overall the 2-year and 5-year biochemical recurrence free survival (BRFS) was 94% and 95% respectively (mean BRFS 46±6 months). 2 years BRFS was 90%, 23% and 22% respectively for 1HR, 2HR and 3HR (log rank p < 0.0001). The prognostic sub-stratification based on three risk factors was significantly predictive for adverse pathologic features and oncologic outcomes. Conclusion: Sub-stratification based on three well-defined criteria leads to a better identification of the most aggressive cancers and prediction of need for additional treatment modalities. Localized HRCaP includes a heterogeneous population of patients with variable oncological outcomes.

POD 06-06
Long-term outcomes of nephrectomy and inferior vena cava thrombectomy in patients with advanced renal cell carcinoma
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Bladder tumours are known for many histological variants. The aim is to evaluate incidence, clinical presentation, histopathology, treatment and prognosis of rare variants of bladder cancer. A retrospective review of institutional database was done to identify all bladder tumours between January 2012 and December 2017. Patients underwent cystoscopy with biopsy /TURBT and histopathology was evaluated. Patients were treated according to standard treatment protocols. Patients were evaluated for incidence, clinical presentation, pathological stage, treatment and median survival. 640 patients were identified to have bladder tumour. 39 (6%) patients had rare variant of bladder tumour with adenocarcinoma 17 (2.8%), squamous cell carcinoma 7 (1.1%), sarcomatoid variant 4 (0.7%), poorly differentiated carcinoma 4 (0.7 %), carcinosarcoma 3 (0.6%) and one of nested variant (0.1%). The most common presentation was hematuria 29 (76%) and irritative LUTS 13 (33%). 30 (78%) of patients had muscle invasive disease on presentation. Majority of patients underwent radical cystectomy 34 (88%). The patients had median survival adenocarcinoma 17 months, squamous cell carcinoma 36 months, sarcomatoid variant 15 months, poorly differentiated carcinoma 30 months and carcinosarcoma 34 months. The rare bladder tumors clinically have presentation similar to transitional cell carcinoma. They present at an advanced stage with majority being muscle invasive at presentation. These variants have poor median survival with adenocarcinoma and sarcomatoid variant having median survival less than 18 months. These rare variants of bladder cancer are aggressive tumours which present late and have poor survival. They should be diagnosed early and managed aggressively.

POD 07-01
Challenges in transplantation of small pediatric cadaver kidneys – IKDRC experience
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Introduction: Pediatric kidney transplant into adult recipient is a well recognised procedure to expand donor pool. Transplantation of pediatric kidneys have become an acceptable option. Pediatric deceased organ donation can help in increasing the organ pool in countries with high organ demand like India. Materials and Methods: A retrospective analysis of prospectively collected data from 1998 to 2018 was performed. Patients were divided into 4 groups. Group 1 is enbloc transplant of pediatric donor kidneys of less than 5 yrs (n=2), group 2 is single kidney pediatric cadaver donors of less than 5 yrs (n=2), group 3 is 6 – 12 yrs (n=10) and group 4 is 12 – 18 yrs age group (n=24). These recipients were on regular follow up from 1998 till date. Results: Recipients were followed up regularly. Mean creatinine is 1.1 mg/dl, 0.35 mg/dl, 0.82 mg/dl and 1.25 mg/dl respectively in all the four groups. Patient survival and graft survival were 75% and 75%, 100% and 100%, 70% and 90%, 79.2% and 96% respectively in all the 4 groups. Conclusion: Pediatric cadavers are excellent ressources which increase donor pool and have to be harvested whenever available. Enbloc transplantation can be preferred if the donor age is less than 5 yrs of age. Pediatric kidneys can adapt their growth and function to adult recipients and provide them with excellent function. In order to alleviate the burden on the waiting list, pediatric kidneys should be transplanted more often when available.

POD 07-02
Vesicoureteral reflux in transplant recipients and role of deflux
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Introduction and Objectives: Vesicoureteral reflux (VUR) due to non-anatomic ureterovesical anastomosis is not uncommon in kidney transplant patients after transplantation. Current gold standard treatment of patients with high-grade VUR and resulting recurrent urinary tract infections is open surgery to revise the ureterovesical anastomosis. Very few studies address Deflux injection in transplanted kidneys. The objective of this study is to determine efficacy and feasibility of Deflux injection for vesicoureteral reflux in kidney transplant patients. Methods: Out of 577 transplantations done from January 2016 to December 2017, five patients
(0.87%) were identified to have symptomatic vesicoureteral reflux. Four patients received one Deflux injection into the transplant ureterovesical junction and one patient needed injection twice. Baseline patient characteristics and treatment characteristics were recorded. Outcomes were assessed with regular patient follow-ups. Results: All the 5 patients were found to have improvement in symptoms including resolution of recurrent urinary tract infections and improvement in renal function and none needed open intervention. Conclusion: Endoscopic treatment with subureteral injection of the bulking agent Deflux to manage VUR in cases of recurrent pyelonephritis of kidney grafts is a non-invasive treatment option with a good success rate and safety profile and can avoid open surgeries in many.

**POD 07-03**

Transposed brachiobasilic AV fistula: Outcome analysis

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Introduction and Objective: According to the NKF-K/DOQI (National Kidney Foundation Kidney Disease Outcomes Quality Initiative) Clinical Practice Guidelines, transposed brachiobasilic arteriovenous fistula (TBBAVF) is the third AV fistula recommended for cases who are unable to undergo dialysis by using radiocephalic or brachiophallic AV fistula, because of either unsuitable anatomy or access failure. The primary objective of this study is to determine the outcomes of brachiobasilic AV fistula transposition performed as a two stage procedure. Methods: The study involves evaluation of data of 25 patients in whom brachiobasilic AV fistula transposition was performed as a two staged procedure at our centre during the study period from June 2014 to January 2018. In all the patients, TBBAVF was performed as secondary or tertiary vascular access site after failed access at previous sites. Results: The operative time was 180-240 minutes (mean: 218 minutes). Three (12%) patients developed post operative limb edema and were managed conservatively. Three (12%) patients had bleeding at the wound site which required re-exploration. Post operative thrombosis of draining vein occurred in 6 patients (24%), out of which 4 (66%) were successfully treated by thrombectomy. The patency rate was 91.6 % at a median follow up of 3 months. Conclusion: The two-step technique of fashioning brachiobasilic arteriovenous fistula is associated with good patency rate and related complications can be treated conservatively without loss of the fistula.

**POD 08-01**

Sacral trans-cutaneous electric nerve stimulation vs oxybutynin for children with overactive bladder

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Introduction: Sacral transcutaneous electric nerve stimulation is an alternative technique to antimuscarinic agents for treating children with overactive bladder. Aim: To compare the effectiveness of sacral Trans-cutaneous Electric Nerve Stimulation (TENS) vs oxybutynin in treatment of overactive bladder in children. Materials and Methods: 40 children (M:F 17:23) with a mean age of 6.2 years were divided into two groups. Group 1 received parasacral TENS –surface electrodes in the S2/S3 region with a symmetric biphasic current of 10 Hz frequency and pulse width of 400 µs for 20 minutes – on alternate days for a total of 10 sessions. Group 2 received oxybutynin 2 mg/kg dose given daily for 20 days. Success was assessed by 1) the rate of complete symptom resolution, 2) a visual analog scale of 0 to 10, 3) the dysfunctional voiding scoring system (DVSS). Results: Twenty patients were randomized to groups 1 and 2, respectively. A significantly higher number of drop outs (p=0.001) was noted 9/20 (45%) in group 1 (due to non compliance with multiple visits to hospital) compared to 1/20 (5%) patient in group 2. Among those who completed the treatment, symptoms completely resolved in 6/11 patients in group 1 (54%) vs 10/19 (52%) in group 2 with no significant difference (p=1). Visual analog score improved in 8/11 (73%) in group 1 vs 15/19 (79%) in group 2 with no significant difference between the groups (p=1). DVSS improved in 9/11 (81%) in group 1 vs 16/19 (84%) in group 2 with no significant difference between the groups (p=1). Group 1 showed no side effects while significantly higher side effects (p=0.001) like dry mouth, hyperthermia and constipation were encountered by 9/19 (47%) in group 2. Conclusions: Parasacral TENS is as effective as oral oxybutynin with lower side effects. However it has poor compliance due to multiple hospital visits involved. Message: Considering the equal efficacy with no side effects of oxybutynin therapy, TENS is a considerable and a feasible option in compliant patients.

**POD 08-02**

Extended ulaanbaatar procedure for proximal penile hypospadias with moderate to severe chordee

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Introduction and Objective: Ulaanbaatar urethroplasty is a two stage procedure. Partial urethropasty is done following chordee correction at glans & distal portion during first stage and rest is done at second stage. In our modified, extended procedure, full length of urethra is constructed following orthoplasty and urination is kept diverted from neo-urethra by perineal urethrostomy would be closed after 6 months. Methods: We performed urethropasty with inlay buccal mucosa along with tunica vaginalis as onlay in 28 patients; aged 1 to 24 years (mean 8.5 years). All neo-urethra were kept on regular calibration for 6 months. Urethroscopy closure was done either with local, regional or general anaesthesia, needs 15-20 minutes as a day care procedure, following maturation of neo-urethra in adequate calibre, usually after 6-10 months. Follow up period ranged from 4 years to 6 months. Results: Urethral fistula and diverticulum did not develop in any patient. However, in one patient had partial wound disruption and two had strawsis, needed reoperation prior to urethroscopy closure. In all patients the glanss with vertical meatus looked normal. Conclusions: At the outset, longer neo-urethra exerts greater resistance to urine flow causes distress both in patients & parents and, so the difficulties of calibration. So the matured urethra, made after regular calibration with diverted urination, obviate that predicament. Similarly disruptions and stricures are managed comfortably with re-operations as urination is diverted. In this procedure, we avoided repeat degloving unlike traditional two-stage procedure. Actually, it’s not a two stage procedure, rather less than that.

**POD 08-03**

Comparison between open and robot assisted kidney transplant in paediatric population - preliminary experience

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Introduction: Robotic Assisted Kidney Transplant (RAKT) is being increasingly utilized in adult patients. Its application in paediatric population is still controversial. Equipment size, learning curve and small working space are major issues. Herein, we are sharing our initial experience of three children who underwent RAKT in our institute and compared their outcome to open kidney transplant in paediatric patients. Materials and Methods: Three children (M:1, F:2) aged between 7-16 years underwent RAKT and 14 (M:8, F:6) aged between 11 -17 years underwent OKT between April 2016 to March 2018. Grafts were procured from adult donors using laparoscopy. Kidney was introduced inside peritoneum through Pfannenstiel incision in one child and Gelport™ in all others. Anastomosis was performed with common iliac vessels (end to side) in all the three cases of RAKT while in open cases depending upon the age of children, anastomosis was done with common, internal or external iliac vessels. Modified Lich-Gregor ureroneocystotomy was performed over DJ stent. Results: Patient demography, operative characteristics and mean operative time, warm ischaemia time, duration of hospital stay
pod 08-04
A long-term international collaborative model for bladder exstrophy-epispadias: Can it sustain and deliver?
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Introduction and Objective: In a complex congenital anomaly like Bladder exstrophy-epispadias, achieving the ultimate goals of adequate bladder capacity, continence and good cosmetic outcome pose a tremendous challenge to the surgeon. The benefits of a collaborative approach with surgeons from different centers combining their expertise for complex surgeries are well known. We review the outcomes of an international collaboration initiated for the management of exstrophy-epispadias. Methods: A long-term collaboration to treat exstrophy-epispadias was created at our institute in 2009. From 2009 to 2018, 124 children operated upon for exstrophy-epispadias were prospectively enrolled in a data registry with institutional review board approval. A strict protocol of follow-up evaluation was maintained. Comprehensive assessment included annual and biannual bladder capacity measurements, incidence of UTI, upper-tract changes, continence (dry-interval) and surgical complications. Results: 124 children with exstrophy (103) and epispadias (21) underwent combined-primary-repair-of-exstrophy with anterior pubic osteotomies and epispadias repair respectively. The follow-up patient retention rate was 95% (n=119). Only 2 exstrophy patients (4%) suffered a bladder dehiscence and underwent redo-repair. Twenty-three (19%) patients experienced complications. The International Consultation on Incontinence Modular Questionnaire administered to a subset of patients (47) in 2016 showed six having complete functional continence (2 exstrophy, 4 epispadias); while 24% of exstrophy and 73% of epispadias patients reported dry intervals >90 minutes. Conclusions: This collaborative focused on exstrophy-epispadias is sustainable and delivers optimal outcomes; it also affords the opportunity to accelerate the learning curve in treating this rare anomaly. We have shown a significant patient retention rate which is critical as upper tract changes can occur years after the initial repair.

pod 09-02
Skeletal related events in renal cell carcinoma: Prediction with A.C.H.E score for risk stratification
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Introduction and Objective: Skeletal metastasis are catastrophic in patients with renal cell carcinoma and lead to skeletal related events such as nerve entrapment, hypercalcemia and even pathological fractures which may require surgical intervention. In this analysis, we aim to correlate blood parameters and bone metastases secondary to renal cell cancer and to identify determinants for bone metastasis in newly diagnosed patients and those who have already received treatment. Methods: The clinical data of 42 patients with RCC and bone metastasis were reviewed from January 2010 to December 2017. The correlation between erythrocyte sedimentation rate (ESR), alkaline phosphatase (ALP), CRP, calcium, hemoglobin (Hb), CEA and bone metastases was analyzed. Risk factors were identified by multivariate logistic regression analysis. The cutoff value of the independent correlation factors were calculated by receiver operating characteristic curve. Results: ESR, ALP, CRP and Hb were significantly associated (p<0.003) and correlated (p<0.02) with bone metastasis. Multivariate logistic regression analysis indicated that ESR, ALP, CRP, Hb were independent risk factors correlated with bone metastasis (p < 0.01). ROC curves demonstrated these factors had comparable accuracy at predicting bone metastasis (AUC= 0.945, 0.845, 0.733, 0.765, respectively). Conclusion: We propose that an A.C.H.E score calculated by receiver operating characteristic curve. The cutoff value of the independent correlation factors were administered to a subset of patients (47) in 2016 showed six having complete functional continence (2 exstrophy, 4 epispadias); while 24% of exstrophy and 73% of epispadias patients reported dry intervals >90 minutes. Conclusions: This collaborative focused on exstrophy-epispadias is sustainable and delivers optimal outcomes; it also affords the opportunity to accelerate the learning curve in treating this rare anomaly. We have shown a significant patient retention rate which is critical as upper tract changes can occur years after the initial repair.

pod 09-03
Pediatric renal transplant: Institute of kidney diseases research center and transplant sciences experience
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Introduction: Major diagnostic groups leading to Chronic Kidney Diseases in pediatric population includes obstructive uropathy, congenital anomalies and inherited disorders, focal segmental glomerulosclerosis and reflux nephropathy. Materials and Methods: A single-center retrospective cohort study was conducted to evaluate our experience with pediatric renal transplantation. The medical records of 150 patients upto the age of 18 years who underwent a renal transplantation procedure between the years 2012 and 2017 was reviewed. These data included information about demographic characteristics of patients, graft function and survival. Results: Out of total, 111 patients underwent open transplant, 34 robotic and remaining 5 underwent laparoscopic renal transplant procedure. 118 patients underwent living related donor kidney transplant and 32 patients received kidneys from cadaveric donors. About 80% were males. The mean age was 13.7 years. Mothers were donor in 77% of the cases, followed by fathers and other family members. The mean pre transplant serum
creatinine was 5.6 and post transplant mean serum creatinine value at 1 year was 1.49 and the latest mean serum creatinine is 1.30. The overall graft survival and patient survival was 91% and 96% respectively. Conclusion: Advances in surgical techniques, preoperative and post operative care, as well as immunosuppressive therapy have contributed to increased patient and graft survival for this population thus leading to better growth and development, good quality of life and also added cost advantage over chronic dialysis.

POD 09-04
Prospective non-randomized comparison between open and robot assisted kidney transplantation
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Introduction: Open Kidney transplant (OKT) has been a well-established procedure for ESRD. Robotic Kidney Transplantation (RKT) has been a recent development, but is yet to gain popularity. Herein, we compare our first 48 RKT with OKT done between April 2016 and March 2018. Materials and Methods: Data of 48 robotic kidney transplant procedures was prospectively collected and compared with randomly selected 48 cases of OKT done during the same period. All graft kidneys were harvested laparoscopically. Kidney was wrapped in an ice slush jacket and inserted into the abdominal cavity of the recipient through a midline umbilical (21 patients) or Pfannenstiel approach (27 patients). A Gelport® was used to seal the midline incision. The comparison was done using Levene’s test for equality of variances and student's t-test for equality of means. Results: The two groups were comparable in terms of age, sex, duration of hemodialysis and warm ischemia time. Recipients in RKT group were having higher body mass index. There was statistically significant less requirement of perioperative analgesic dose in RKT group. Re-warm ischemia time was longer in RKT group, which was statistically significant. There was slow fall in creatinine levels in RKT group (statistically significant). If we exclude 5 patients with medical complications, the difference is not statistically significant at days 7 and at 3 months. Conclusions: RKT confers advantage of decreased wound morbidity with similar functional outcomes as compared to OKT in short term. It looks promising; however, long term follow-up of large number of patients in needed.

POD 09-05
Comparison of outcomes between low and high nephrometry score renal tumors managed by robot assisted partial nephrectomy: Our experience
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Introduction: Nephron preservation is important while managing renal tumors, especially in patients with co-morbidities. Herein, we reviewed our prospectively maintained data to compare the outcomes between low and high Renal Nephrometry score renal masses in patients who were managed with Robot assisted partial nephrectomy (RAPN). Materials and Methods: From October 2015 to January 2018, around 51 RAPN were done in our center using da Vinci Xi surgical robotic platform, by single surgeon. The patients were evaluated in detail and inserted into the abdominal cavity of the recipient through a midline umbilical (21 patients) or Pfannenstiel approach (27 patients). A Gelport® was used to seal the midline incision. The comparison was done using Levene’s test for equality of variances and student's t-test for equality of means. Results: The two groups were comparable in terms of age, sex, duration of hemodialysis and warm ischemia time. Recipients in RKT group were having higher body mass index. There was statistically significant less requirement of perioperative analgesic dose in RKT group. Re-warm ischemia time was longer in RKT group, which was statistically significant. There was slow fall in creatinine levels in RKT group (statistically significant). If we exclude 5 patients with medical complications, the difference is not statistically significant at days 7 and at 3 months. Conclusions: RKT confers advantage of decreased wound morbidity with similar functional outcomes as compared to OKT in short term. It looks promising; however, long term follow-up of large number of patients in needed.
POD 10-03
Folate deficiency: Risk factor in erectile dysfunction?
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Introduction: Erectile dysfunction (ED) has an overall prevalence of 52% among 40–70 years old men. ED is due to disruptions in neural, vascular, and hormonal signaling. Endothelial dysfunction is related to uncoupling of the endothelial nitric oxide (NO) synthase thereby reducing the NO levels. Folic acid (FA) potentially reverses the uncoupling of NO synthase.

The aim of this study was to find the correlation of FA deficiency and ED. Materials and Methods: Patients between age 35 to 65 affected by ED assessed by the International Index of Erectile Function (5-IEF-5) on treatment with tadalafil 10 mg were evaluated. Patients improved on tadalafil were taken as control (n=40) and those who did not as case (n=42).

After informed consent, fasting serum FA was measured. Statistical analyses were performed using SPSS 13. Results: The mean IIEF scores before and after treatment with tadalafil were 9.65 and 11.80 in group A (case) and 9.70 and 17.37 in group B (control) respectively. The difference of mean IIEF score after treatment with tadalafil between the two groups was significant (P=0.002). The serum FA concentrations were lower in patients of group A (7.61 ng/ml), than in Group B (21.23 ng/ml) P < 0.05. The serum FA levels were positively correlated with IIEF-5 scores (r = 0.589, P < 0.01).

Conclusion: Serum FA was deficient in patients refractory to treatment with PDE5 inhibitors. FA supplementation may prove advantageous to men with sexual dysfunction. However, additional experimental and clinical studies are needed to determine appropriate doses of FA.

POD 10-04
Association between lower urinary tract symptoms, erectile dysfunction and metabolic syndrome
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Introduction: Many large epidemiological studies provide overwhelming evidence of a link between erectile dysfunction (ED) and lower urinary tract symptoms (LUTS). Clinical evidence suggests that several common pathophysiological mechanisms are involved in the development of ED, LUTS & Metabolic syndrome (MetS). Objective: To determine the association between ED and MetS in patients presenting with LUTS due to BPE. Methods: 180 patients admitted to our urology dept, with BPE-related LUTS were included in the study period Jan-April 2018. LUTS &ED were classified as mild, moderate and severe according to IPSS & IIEF-5 respectively and NCEPAT Panel III criteria was used to diagnose MetS. Student T test and chi-squared tests were performed to calculate the continuous and categorical variables respectively using SPSS software.  "P" value < 0.05 was considered statistically significant. Results: Mean age of the patients was 63.8 years. 36% of the patients with MetS, severe LUTS was found to be statistically higher than those with mild and moderate LUTS. Also a negative correlation was appreciated between IPSS and IIEF-5 scores. Conclusion: In patients with LUTS due to BPE, when the severity of symptoms increases, frequency of MetS & ED follows suit.

POD 10-05
Comparison of testicular volume between fertile and infertile population
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Introduction: Testicular volume has long been associated with testicular function. Racial variations in testicular volume do exist. Neither the critical minimum testicular volume that guarantees adequate function, nor the optimal testicular volume that indicates peak testicular function are also known. We have compared testicular size among fertile and infertile people attending our urology opd. Methods: About 1301 subjects were clinically examined over a period of two years attending department of urology. 413 patients were fertile with at least one child without any supportive treatment attending urology opd with ailments other than infertility and 888 patients were infertile as per WHO definition. Testicular volumes of all subjects were measured by using prader’s orchidometer. Results: Mean testicular volume for fertile and infertile patients was 17.08 ml and 16.45 ml respectively. Contrary to previous studies there was no significant difference between testicular size among fertile and infertile patients. Subjects with as low as 12 ml were fertile and even patients with testicular volume of 20 ml were infertile. If patients with UDT, urogenital syndrome, abnormal anatomy etc are excluded then results are more difficult to associate testicular size and fertility. Conclusion: Testicular volume does not correlate well with infertility. Critical mean testicular volume for adequate fertility is still not established. Large population studies are required to correlate testicular size and fertility.

POD 10-06
To study the impact of surgical viagra in enhancing sexual function and sex hormones in obese males
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Introduction: Obesity has been associated with decreases in testosterone and sex hormone binding globulin for men and increase in testosterone and estrogen for women. Several studies have shown improvement in sex hormone levels in both men and women following weight loss. Aim: To evaluate the changes in sexual function in males following bariatric surgery for obesity. Materials and Methods: This was a prospective study conducted over the last 2 years. The inclusion criteria included patients more than 18 years age, BMI more than 30 with undergoing bariatric surgery. Patients with previous diagnosis and treatment of hypogonadism, pituitary disease, Chronic Kidney Disease, Chronic Liver Disease, history of testosterone replacement therapy were excluded. A total of 32 patients were included in our study. Apart from anthropometric data and standard bariatric surgery investigations, Serum testosterone level and the SHIM score were recorded for each patient preoperatively and post operatively. Results: Mean age was 37.5 years. 40.6 % were diabetic, 46.8 % were hypertensives, 59.3% had Sleep Apnoea 71.8 % patients underwent Laparoscopic Sleeve Gastrectomy while the rest underwent Laparoscopic Roux en Y Gastric Bypass. The preoperative SHIM score and testosterone levels were 9 and 2.5 ng/ml respectively. At 6 months the SHIM score and testosterone level were 16 and 4.5 ng/ml respectively which further improved at 12 months to 21 and 6.2 ng/ml respectively. Conclusion: This study demonstrated a marked improvement in sexual function shown by the increase in SHIM scores and serum testosterone following bariatric surgery for obesity in males.

MODERATED VIDEO SESSION 1: URO ONCOLOGY GENERAL, PEDIATRIC AND RECONSTRUCTIVE UROLOGY
MV 01-01
Technique of laparoscopic nephroureterectomy in multiple lower ureteral TCC avoiding tumour spillage
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Introduction and Objective: The major concern in laparoscopic nephroureterectomy for multicentric TCC is spillage of tumour tissue around the hiatus. Here we illustrate the spill free technique and inclusion of bladder cuff. Methods: A 53 year old female presented with hematuria associated with clots for two weeks duration. On evaluation Contrast CT Abdomen showed multiple right lower ureteric tumours. Cystoscopy revealed no bladder tumour. During laparoscopy in our spill free technique, we mobilised the distal ureter upto hiatus and further dissected the detrusor.
A 17 year old female presented with complaints of amenorrhea and continuous urine leakage even after she underwent surgery shortly after birth for a common urinary and fecal channel. On evaluation patient was found to be devoid of all the female genital organs (Ovaries, uterus, cervix and vagina). She had a normal looking anal opening with a widely patent bladder neck with continuous urine leakage. There was scar tissue in between the bladder neck and anus. Patient was offered urethral reconstruction and creation of neo vagina but she refused the latter. She underwent creation of neo urethra from locally available tissue which was wrapped around with a gracilis flap harvested from right thigh. Following catheter removal patient is continent with just 1-2 pad/day.

MV 01-05
Laparoscopic partial nephrectomy for completely endophytic tumour
Anil Kumar Guia
VPS Rockland Hospital, Qutab Institutional Area, Delhi, India

Objective: To demonstrate technique of laparoscopic partial nephrectomy (LPN) for completely endophytic tumour in a difficult location. Materials and Methods: A 72 year old diabetic lady with incidentally detected right renal endophytic tumour. Tumour was 3x2.5 cm sized, completely endophytic, located posteriorly and abutting renal sinus. Transperitoneal laparoscopic right partial nephrectomy done with clamping of both renal artery as well as vein. Results: Tumour size was 3x2.5 cm, warm ischemia time 35 minutes and estimated blood loss 150 ml. There was no complication and patient discharged on postoperative day 3. Histopathology report showed clear renal cell carcinoma with negative margins. At 8 months of follow up, patient is doing well with no recurrence and preserved renal function. Conclusion: In experienced hands, laparoscopic partial nephrectomy for challenging endophytic tumours can be done safely with good outcome.

MV 01-06
Laparoscopic-assisted radical nephroureterectomy with bladder cuff excision and lymphadenectomy
Ashwin Giridhar

Asopas single stage repair for proximal hypospadias
Step by step video
H. R. Pathak, V. V. Agarwal
Department of Urology, BYL Nair Hospital, Mumbai, Maharashtra, India

Hypospadias is one of the oldest disease known to mankind, despite this the treatment protocol is not standardized. Its repair is one of the most challenging problems for operating surgeons due to its high complication rate. The reported incidence of complications range from 6% to 30% depending upon severity of hypospadias. One of the major dispute is between single stage vs. two stage repair. A single-stage repair is used by many surgeons and achieves a high success rate, being safe, effective, less morbid with comparable success as staged repair and better cosmetic outcomes. Asopas performed a single stage repair by using transverse inner preputial onlay flap based on superficial dorsal vessels for repair of proximal hypospadias. After degloving of the penis, the inner preputial flap was wrapped around the shaft of penis and anastomosed to the urethral plate on both sides. Healing is better as the transferred skin carries its own blood supply. The advantage of Asopa’s repair over other repairs like Duckett, Snodgrass is that there is less incidence of fistula formation. Here we describe a step by step approach of Asopas single step repair for proximal hypospadias.

MV 01-03
Laparoscopic assisted radical cystectomy and anterior exenteration with ileal conduit urinary diversion for locally advanced bladder cancer
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Introduction: Laparoscopic surgery is proven beyond doubt, in terms of lower morbidity and mortality compared to open surgery with equivalent oncological outcome. But locally advanced CA bladder is traditionally managed by open surgery. We intend to define technique of Laparoscopic assisted Radical Cystectomy and anterior Exenteration with Ileal conduit Urinary diversion for locally advanced Bladder cancer. Patients and Methods: 56 year old lady presented with history of hematuria and flank pain for past 3 months. On primary evaluation with CECT KUB metastatic workup, Cystoscopy & URBT she had clinically T3a N1 Mo TCC bladder cancer. Patient was uneventful postoperative recovery and was discharged on 5th postoperative day. Histopathological examination showed T4a N1 Mo TCC bladder cancer. Patient was referred for adjuvant chemotherapy. Conclusion: Laparoscopic assisted Radical cystectomy and anterior exenteration is feasible with excellent post operative outcome and should be tried as first option whenever feasible.

MV 01-04
Absent urethra, MRKH in an operated case of cloacal malformation: A management challenge
H. S. Bhatyal, Y. Garg, A. Arya
BLK Superspeciality Hospital, New Delhi, India

A 17 year old female presented with complaints of amenorrhea and continuous urine leakage ever since she underwent surgery shortly after birth for a common urinary and fecal channel. On evaluation patient was found to be devoid of all the female genital organs (Ovaries, uterus, cervix and vagina). She had a normal looking anal opening with a widely patent bladder neck with continuous urine leakage. There was scar tissue in between the bladder neck and anus. Patient was offered urethral reconstruction and creation of neo vagina but she refused the latter. She underwent creation of neo urethra from locally available tissue which was wrapped around with a gracilis flap harvested from right thigh. Following catheter removal patient is continent with just 1-2 pad/day.
through vagina (NOSE) using two arms is possible in selected cases with excellent outcome in terms of early return to work with minimal morbidity. Further limited use of instruments augments reduction in treatment cost.

**MV 02-02**

**Laparoscopic (robot-assisted) saphenous vein sparing VEIL video demonstration and single centre experience**

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Introduction and Objectives: Open inguinal lymphadenectomy is a gold standard treatment for patients with invasive penile SCC who are at risk of regional and distant metastases. Despite the use of thick skin flaps based on the blood supply superficial to Scarpa’s fascia, perioperative complications of cellulitis, flap necrosis, and leg edema can affect as many as two thirds of patients. We report the study of robotic-assisted saphenous vein sparing inguinal lymph node dissections in high risk patients or palpable lymph nodes. Materials and Methods: We reviewed our patient series from 2012 till 2017 which included carcinoma penis and carcinoma of distal urethra and analysed the data set. Our technique of R-VEIL is shown in the video. A 2-cm mid-thigh incision was made to develop a plane just deep to Camper’s (fatty) fascia. Once a sufficient working space was created to place 3 robotic ports and 1 assistant port, subcutaneous gas was instilled and the robotic device was docked and used to perform the dissection. The surgical approach replicated the principles of open techniques such that the contents of the femoral canal were dissected to include both superficial and deep lymph nodes in the dissection template. Results: A total of 18 patients underwent R-VEIL in this period of 5 years. Mean age was 59 ± 2 years. Eight patients underwent bilateral VEIL while rest underwent unilateral. R-PLND was performed in five of eighteen. Total console time reduced from 230 minutes to 90 minutes with experience. The mean EBL was 67 ml. The average lymph node yield was around 15 nodes. Lymphocele was the commonest complication, which was managed conservatively. Conclusion: Early results suggest that this approach is feasible, safe, and offers an appropriate oncological dissection in selected patients. Saphenous vein sparing technique ensures a lower complications rate reducing lymphorrhea, skin necrosis.

**MV 02-03**

**Robotic partial nephrectomy in a case of multifocal tumor**

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Introduction and Objective: Partial nephrectomy is the gold standard in the management of T1 Renal tumor. However in the case of multiple renal tumors the decision to do multiple partial nephrectomies depends on the eGFR a. Methods: A 60 year old gentleman was incidentally detected to have multiple renal masses in the right kidney in a routine health check-up. CECT showed multiple renal masses – largest being 4 cm – lateral cortex upper pole 1.3 cm – mid right kidney 1.7 cm medially anterior – mid right kidney 1.6 cm corticomedullary lesion posterior lower pole 2 cm cyst in right mid kidney. Results: Partial nephrectomies were successfully completed with a warm ischemia time of 27 minutes. Postoperative period was uneventful. He was discharged with a creatinine value of 1.1. The video depicts the technique of the same. Conclusions: Robotic partial nephrectomy for 3 or more tumors in a single kidney is safe and feasible in selected patients. More importantly, these data demonstrate exceptional renal function preservation despite the highly challenging nature of this type of surgery.

**MV 02-04**

**Laparoscopic (robot-assisted) retroperitoneal lymph node dissection in non-seminomatous germ cell tumors: Video demonstration and single centre experience**

Naresh D. Badlani, T. B. Yuvaraja, Waigankar Santosh, R. Srivathsan
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Introduction and Objectives: Laparoscopic RPLND (L-RPLND) in non-seminomatous germ cell tumors (NSGCTs) have several limitations. The robotic approach is being attempted to overcome these limitations. We aim to evaluate the surgical technique and outcomes of the robot-assisted retroperitoneal lymph node dissection (R-RPLND) for NSGCTs at our institution. Materials and Methods: 11 patients (2012-2017) underwent R-RPLND for NSGCT [Clinical Stage (CS) I-IIA and Post-chemotherapy residual masses]. Retrospective data on patient demographics, preoperative tumor characteristics, perioperative outcomes [open conversion rate, lymph node (LN) yield, rate of positive LNs, operative time, estimated blood loss (EBL), length of stay (LOS)] & tumor recurrence rates were recorded. Steps of R-RPLND include caecal mobilization up to ligament of treitz, full bilateral template dissection redocking & excision of the ipsilateral spermatic cord remnant. Results: The mean operative time was 249 ± 39 mins. The mean EBL was 103 ± 56 ml and LOS was 2.4 days. Tumour was the commonest pathology with mean LN yield of 22. At a mean follow-up of 15 (6-24) months, there were no recurrences. There were no intraoperative complications, 2 early postoperative complications (18%), no late complications. One patient (9%) with positive nodes received adjuvant chemotherapy. The 2-year recurrence-free survival rate was 97% (95% CI: 82-100%). Conclusions: Robotic surgery is a safe and feasible method for resecting masses especially in cases of difficult to reach retroperitoneal lymph node dissection. Laparoscopically, Robotic approach with its 3D – Imaging system improves maneuverability & precision of the dissection in the retroperitoneum and cul-de-sac.

**MV 02-05**

**Use of near infrared fluorescence and intraoperative ultrasound in robot assisted partial nephrectomy**

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Partial Nephrectomy Introduction and Objective: With more complex kidney tumors treated by nephron-sparing surgery (NSS), complete tumor resection becomes challenging. Intraoperative imaging during Robot Assisted NSS may improve the establishment of negative surgical margins. Herein, we present an edited video of 4 cases in which we utilized intraoperative ultrasound and near infrared fluorescence (NIRF) for robot assisted excision of complex renal masses alongside our experience in Robot Assisted Partial Nephrectomy. Materials and Methods: Using intra operative ultrasound (X12C4 drop-in transducer, BK ultrasound) the tumor margins were marked on all sides, before proceeding with enucleation. Following hilar dissection and clamping of renal artery, 5 ml Indocyanine Green (1 mg/ml) was intravenously injected and near infra red light was activated. Depending on the fluorescence of the tumour bearing area selective/ total clamping of renal vessels was done. Results: RENAL score Blood loss Warm ischemia Case I 10H 200 ml Main vessel clamped depending on fluorescence 30 mins Case II 11P 200 ml Intraoperative USG identification of intrahilar tumour 30 mins Case III 9A 250 ml Selective arterial clamping 20 mins Case IV 8P 200 ml Main vessel clamped depending on fluorescence 24 mins. Conclusion: Intra operative ultrasound aids in tumour localization and delineation enabling margin identification, especially in completely endophytic tumours. NIRF additionally guides selective renal ischemia in real time and helps in selective renal clamping.

**MV 02-06**

**Avoiding tumor transgression while doing partial nephrectomy: Cognition vs. calculation**

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Aim: Tumor transgression while doing partial nephrectomy in large and complex tumor is not an infrequent occurrence. This video describes use of simple measurements to avoid tumor violation during partial nephrectomy. Methods: Morphometric measurement of a tumor was done in axial cuts on contrast enhanced CT scan of renal tumor with RENAL equal to or more than 10. Two key points were measured, one is the distance from renal cortex; site of an incision, to the innermost part of the tumor and second the distance from the pelvicalyceal system. Correspondent distances were compared with the scissors tip to see for the depth of incision. This method
An unusual association – TCC with staghorn calculi

MP 01-03

An unusual association – TCC with staghorn calculi

Shabbir Husain
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Introduction: Commonly staghorn calculi are associated with squamous cell carcinomas. Low grade Transitional cell carcinoma with staghorn calculi is rare. Case Summary: 50 yrs male presented with occasional Left flank pain since few years. No positive history of hematuria before. No significant LUTS. No significant history of tobacco ingestion. Labs – Hb – 13 gm%, creatinine- 1.2 mg/dl, urine R/M - NAD USG – S/o multiple stones located in all calyces and pelvis X ray- showing left staghorn calculi (ECT- showing left staghorn calculi with contrast in PCN and Ureter. PCNL surgery was done, three punctures were taken. After breaking and evacuating stones from upper calyceal puncture, a papilliform growth could be visualized. That growth was biopsied using peanut forcep. HPR came as Low grade transitional cell carcinoma. Discussion: Though occurrence of Malignancy along with stone is rare phenomena. Mainly the staghorn calculus are associated with squamous cell carcinomas but here we have encountered a case of TCC of low grade which a very rare occurrence. Although the rate of malignant tumor present in staghorn stone is rare, a few cancers still can be seen during operations that can not be found before the surgery. Conclusion: Though malignancy are rare with staghorn calculi but they should be kept in mind while dealing with long standing calculi. There are some pointers like filling defects or renal margin abnormalities on CECT which can guide us preoperatively in picking up such lesions.
average number of tract needed were 1.4, average stone density (1195 HU), average hemoglobin drop was 1.3 g% but none needed blood transfusion, stone free rate on 1st POD and 1 month follow up was 93.8% and 96.2% respectively. Auxiliary procedure needed in 7 patients (4 PCNL and 3 RIRS), overall complication rate was 7.6%. Conclusion: Olympus shock pulse is a safe and feasible option for management of large renal stone burden disease to achieve stone clearance in single sitting with fewer numbers of puncture less operative time and fewer complications.

**MP 01-06**

Metachronous renal pelvic urothelial metastases from clear cell renal cell carcinoma: A diagnostic dilemma and therapeutic challenge

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Introduction: The incidence of urothelial metastases for ccRCC in autopsy series has been reported to be around 1%. Only few cases have been reported in the English literature. However the urothelial metastases to pelvicalyceal system are relatively unknown. More so in our case the equivocal imaging findings, bilateral RCC, previous ipsilateral RFA treatment and solitary kidney made it quite challenging to manage the case. Summary: A 61 year old lady diagnosed with right renal mass on CT colonogram in September 2014. Subsequent right laparoscopic radical nephrectomy revealed ccRCC. Another equivocal left renal lesion showed increased growth to 13 mm on follow up CT and MRI scan after 6 months, which on biopsy suggested ccRCC. Subsequent CT guided RFA of the left renal lesion was done in October 2015. Follow up CT scan in January 2018 showed new two enhancing lesions in the left renal pelvis/ proximal ureter. Holmium laser excision and extraction of these lesions with using semirigid ureterorenoscopy (URS) was done. Histology showed it to be a ccRCC with negative CD10, in keeping with the profile of ipsilateral ccRCC. Conclusion: Urothelial metastases from RCC are rare and can cause diagnostic dilemma in view of differential with urothelial cancers. Immunohistochemical studies are often helpful. Treatment is not defined due to rarity of the condition and often has to be tailored according to individual patient. Endoscopic treatment is feasible and often should be used as first line measure to optimise the chances of preserving renal function especially in the metachronous setting.

**MP 01-07**

Role of metallic stent in reducing cancer morbidity in malignant ureteric obstruction - A preliminary study from western India-long term result from single institution

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Introduction: Ureteral obstruction caused by extrinsic compression is commonly associated with intra-abdominal malignancy for which Internal drainage with ureteral stents is typically the first-line therapy. The limitation of polymeric ureteral stents is easy compression and recurrence of obstruction. The metallic stents were introduced to improve the patency rates, obviating the need for frequent stent exchange Materials We described the functional outcomes of a Resonance metallic ureteral stent in patients with malignant ureteral obstruction. Methods: Cancer patients with malignant ureteric obstruction who received Resonance stents for malignant ureteral obstruction, between Mar 2014 and Mar 2017 were included in study. Stent failure was detected by clinical symptoms, imaging studies, renal function test and functional duration. Results: A total of 27 stents (all retrograde) successfully inserted in 20 patients with malignant ureteral obstruction. After insertion of Resonance metallic stents, hydronephrosis subsided or remained stable in 89% (24/27) of the ureteral units. Serum creatinine decreased or remained stable in 90% (18/20) of these patients. In 15% ureteric units (3/27) metallic stents were required to be removed or changed. The Resonance stent exhibited a mean increase in functional response at minimal 1 yr follow up. Conclusion: Metallic ureteral stent placement is a technically feasible procedure with minimal complications and is well tolerated among patients. Metallic stents can be left in situ for longer durations and provide a significant financial benefit compared to frequent polymer stents replacements. Preference of metallic stent as alternate to nephrostomy reduce morbidity and better quality of life for terminally ill patients.

**MP 01-08**

Role of triple D score to predict the stone free rate post shock wave lithotripsy: Our experience


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Introduction and Objective: To predict the efficacy of primary Extracorporeal shock wave lithotripsy (ESWL) stone free rates using Triple D scoring system in the era of Miniperc/RIRS. Materials and Methods: A retrospective analysis was performed over a period of 2 year from 2016 to 2018, retrieving 100 cases of renal and upper ureteric stones who underwent ESWL with available preoperative CT scan. In all the cases stone density, ellipsoid stone volume (ESV) and skin to stone distance (SSD) was determined and triple D score was calculated. The ROC curves were established to determine the cut off value for each parameter. Results: Seventy two out of 100 patients (72%) who underwent ESWL were stone free after single session treatment. ESV, SSD, and stone density were significant predictors of ESWL success. Based upon the ROC curves, cutoffs of <150 mm3 for ESV, <110 mm for SSD, and <900 HU for stone density were established. A Triple D Score of 0, 1, 2, and 3 correlated with ESWL success rates 50.0%, 68.4%, 80% and 87.5% respectively. Conclusion: The Triple D Score appears to be a useful predictor of ESWL treatment outcomes. The use of ESWL in patients with score 2 or above shall allow us to improve operative outcomes and guide us for suitable patient identification.

**MP 01-09**

Successful treatment in endourology for stones-(STONE-FECTA) – Novel concept of outcome reporting

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Introduction: Even after first description of percutaneous nephrolithotomy in staghorn calculi in 1983 treatment of staghorn stone still remains challenging task forurologist. Technologialadvancements have improved outcomes of PCNL in staghorn calculi. However prediction of outcome of PCNL for staghorn calculi is not universalized. We attempt to present novel method for reporting outcomes asSuccessful treatment in endourology for stones (STONE-FECTA). In present study we find out potential factors affecting the STONE- fecta. STONE-FECTA is defined as Patients who attained simultaneously a stonefree rate in one procedure, no urinary infections and no urological complications. Materials and Methods: We retrospectively reviewed case records of patients who underwent PCNL for staghorn calculi during the period of January 2011 to December 2017. Total 200 patients were included. Pre and postoperative investigations, operative records, followup data included. Correlation of the variables with number of tracts and stone size as classified by stone morphometry was assessed. Statistical analysis were performed with SSPS 18.0. Results: Mean age (±SD) was 42.49±15.33 years. Division of staghorn stones as per morphometry classification were type 1-21%, type 2A-41%, type 2B- 22%, type 3-16%. Mean tract number was 1.68±1.12. STONE-Fecta was achieved in 55% patients at 3 months followup (type 1-73.80%, 2A-65.85%, 2B-40.9%, 3-21.875%). Conclusion: Stone morphometry was found to be independent variable affecting STONE-fecta. Complex is the stone morphometry, worse the STONE Fecta achievement probability.

**MP 01-10**

Ureteric hemangioma: A rare entity presenting with hematuria

Priyank Shah, Shirish Yande, Krutik Raval, Kunal Borade, Bonny Shah

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Urethral cavernous hemangiomas are rare benign tumors that most commonly present as urethral bleeding. There are hardly any clinical signs for their indication. The hemangioma located in this study is the cavernous type. Hemangiomas are rarely found in the female population. A 66 year old female presented with the complaint of intermittent hematuria and occasional clots in the urine sample provided. For diagnostic purposes a Computed tomography (CT) report was taken which revealed Intraluminal isodense, pedunculated lesion at mid-ureter level just proximal to the level of iliac crossing measuring approx. 19 mm X 12 mm (diameter) Ureteroscopy, and Laser Excision of the mass with right DJ stenting done. Cases of similar presentation should be screened for the presence of hemangiomas as it is often difficult to diagnose during the initial examination on the basis of history alone.

MP 01-11
Staged B/L PCNL in 2.5 year old child: Our experience
Amit Kumar Devra, Manoj Agarwal Lok Prakash Chaudhary
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Introduction: Paediatric endoscopic stone management is safe and effective way of dealing large stone burden and now a days it has been widely practised in a tertiary care centre where good expertise and instruments are available. Materials and Methods: Here we present, 2.5 years male child from Turkistan who presented to our hospital with complaints of vague pain abdomen. Physical examination was unremarkable. On initial evaluation ultrasound suggested left hydroureteronephrosis with bilateral multiple renal stone. The blood tests and renal function were normal. CT scan showed right hydrenephrotic kidney with partial staghorn calculus and multiple lower calyceal stones. The Left kidney had moderate hydroureteronephrosis with large 1.5 cm lower ureteric stone and multiple renal stone. DTPA was suggestive left poor functioning kidney (22%) with total GFR 80 ml. A detailed metabolic evaluation and nephrology consultation was made to rule out renal tubular acidosis. However no definite metabolic abnormality was found. Child was planned for staged left followed by right endoscopic stone clearance surgery. First we did left URS + Stage I PCNL. After 2 days child was ported for stage II PCNL + Left DJ stenting. The child was discharged two days after 2nd surgery. The child was readmitted for right side stone clearance we performed staged PCNL for right side. The child was stone free and was discharged after 2 days with B/L DJ stent in situ. Conclusion: PCNL in young child is safe and effective.

MP 01-12
Chyluria in young child: A rare presentation
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Introduction and Objective: Chyluria, a chronic manifestation of lymphatic filariasis, is uncommon in children. It requires a high index of suspicion to diagnose this condition in children as it mimics nephrotic syndrome. Methods: We report an unusual case of a 7-year-old child who presented with chyluria to our department. Results: A 7-year-old boy hailing from a filarial endemic region presented with intermittent passage of milky urine and few episodes of haematuria with renal colicis for the last 3 months, which on evaluation was diagnosed as parasitic chyluria. The child showed remission after medical management that persisted until 1 year of follow-up. Conclusion: Parasitic chyluria is very rare in children and needs high index of suspicion for diagnosis. The prognosis seems to be good for children with few recurrences and complete remission with medical management.

MODERATED POSTER SESSION 2: URO ONCOLOGY

MP 02-01
Transpubic cystoprostatectomy for leiomyosarcoma of prostate: A rare surgical approach for a rare tumor
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Prostate sarcoma originates from the prostatic stroma and it is an extremely rare neoplasm that accounts for less than 0.1% of primary prostate malignancies; globally, less than 200 cases have been reported in the literature. Leiomyosarcoma is the most common primary prostate sarcoma in adults and constitutes 38–52% of them. It has an aggressive clinical course. Surgery with or without chemotherapy/radiotherapy would appear to be the mainstay of treatment for leiomyosarcoma of the prostate for operable cases. We present a case of leiomyosarcoma of prostate diagnosed on transrectal ultrasonography guided biopsy of the prostate. MRI Abdomen and pelvis showed an organ-confined 9.3 x 8.5 x 7.6 cm mass arising from the prostate. There was no evidence of metastasis on PET CT. Patient underwent transpubic cystoprostatectomy with pelvic lymphadenectomy and ileal conduit. On exploration, the mass was occupying the entire pelvis with no space between the mass and the peripheral wall. Softening within the form of superior trans pubectomy was done to gain control of dorsal venous plexus and to reach the apex of prostate. Post-operative recovery was uneventful. Histopathology revealed a high grade leiomyosarcoma (650 gms) arising from the prostate with no extra-prostatic extension. On Immunohistochemistry, smooth muscle actin strongly and desmin was focally and faintly positive. We suggest that transpubic approach may be used with serious complications in the setting of large prostatic mass to facilitate resection and to contemplate cure.

MP 02-02
The predictive accuracy of hypoechoic lesion on transrectal ultrasound in diagnosis of prostate cancer
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Aim: To investigate the predictive accuracy of hypoechoic lesion on Transrectal Ultrasound (TRUS) at different levels of raised PSA, in patients undergoing TRUS guided 12-core biopsy. Methods: Patients presenting to Urology Dept. with LUTS having elevated PSA level above 4 ng/ml or suspicious DRE findings were included in the study. They were subjected to TRUS and TRUS guided 12 core biopsy of prostate. The clinical parameters including age, DRE findings, Sr, PSA, prostate gland volume, PSA density, TRUS findings and HPR including Gleason’s grading were recorded from 81 patients. Results: There were 56 patients (69.1%) with no visible hypoechoic lesion and 25 patients (30.9%) with hypoechoic lesion on TRUS. Total cancer detection rate was 44.4%. Out of 25 patients with hypoechoic lesion, TRUS guided 12-core biopsy revealed malignancy in 22 patients (88%). The sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of hypoechoic lesion for carcinoma prostate in all patients were 61.1%, 93.3%, 88% and 75% respectively. The predictive accuracy of hypoechoic lesion for prostate cancer also varied among different PSA intervals. Hypoechoic lesions were also inclined to be detected in patients with higher Gleason’s score. Conclusion: Hypoechoic lesion on TRUS is a useful indicator for prostate cancer detection hence we conclude that it could improve the predictive accuracy for diagnosis of prostate cancer which also varies with PSA intervals.

MP 02-03
Leydig cell tumour of testis presenting as primary infertility: A rare presentation
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Introduction: Leydig cell tumors of testis constitute to only 1 - 3 % of all testicular tumors and 75- 80% of sex cord stromal tumors. They usually present as painless mass or with features of hormonal excess. Incidence of infertility in Leydig cell tumors is uncertain. We, therefore present a case of Leydig cell tumor, presented as infertility. Our case – 45-year male, presented with infertility and right scrotal pain. Initial scrotal ultrasound was suggestive of right epididymo-orchiditis with left epididymal cyst and was treated for the same other center. Semen analysis done twice showed severe oligo-asthenospermia. The patient underwent treatment for infertility with 2 cycles of IVF which eventually failed. Repeat scrotal ultrasound, showed vascular heterogeneous island of tissue in right testis.
A high inguinal orchiectomy was done owing to high index of suspicion. Conclusion: Patients with Leydig cell tumor of testis can rarely present as infertility.

**MP 02-04**

Prospective comparison of the immunological response following minimally invasive and open surgery for renal cell carcinoma

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Introduction and Objective: Major surgical procedures like nephrectomy (partial/radical) initiate physiological stress on the body's immune system which depends on the extent of invasiveness of surgery. To compare the systemic acute cytokine response, between open and minimally invasive surgery in patients with renal cell carcinoma (RCC) undergoing nephrectomy/NSS. Methods: The patients with RCC were prospectively allocated into two groups. Group I underwent open surgery and group 2 underwent minimally invasive surgery (laparoscopic/robotic). Serum analysis of interleukin IL-1β, IL-1ra, IL-6, and TNF-α was done preoperatively (time point T0), and after 24 and 72 hours postoperatively (time points T1 and T2) by ELISA technique. Results: The median tumor size for open surgery was significantly higher compared to minimally invasive surgery group (open 9.70±2.85 cm; laparoscopic 7.77±1.99 cm; robotic 5.36±1.99 cm; p<0.009). No significant differences in serum IL-1, IL-10 and TNF-α were demonstrated between the surgical procedures as well as at different time points in the same group. The changes in dynamics of serum IL-6 with time were found to be statistically significant in all the groups i.e. open (p=0.003), laparoscopic (p=0.007) and robotic (p=0.002). Additionally, on an intergroup comparison, there was the significant drop in levels of IL-6 at 72 hours in the robotic group in comparison to the laparoscopy group (p=0.048). This indicates lesser interference of immune system which translates as a more rapid functional recovery in patients of robot-assisted NSS/nephrectomy. Conclusion: IL-6 may be an objective marker of the surgical stress response. Robot-assisted NSS elicits an attenuated immunological response compared with laparoscopic nephrectomy.

**MP 02-05**

Management of B/L inguinal regional skin necrosis in case of modified inguinal lymph node dissection in CA penis

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Primary penile cancer is a rare neoplasm. Its frequency varies in Western countries. It is estimated between 0.3% to 0.5% of human cancers in the USA with an estimated incidence of less than 1 per 100,000 in Europe. However penile cancer is one of the most common genitourinary cancers encountered in developing countries like India. Surgical management of inguinal lymph node is disappointing as it results in morbidity to the patient. We present this interesting case of Ca penis who undergone total penectomy first then B/L modified inguinal lymph node dissection in separate procedure. Post operatively patient had extensive B/L inguinal region skin necrosis with HPE reports showing pT3 N2 Mx with positive margin and managed later on with residual urethrectomy with bladder neck closure with on table frozen section biopsy with B/L lateral circumflex femoral artery perforator based fasciocutaneous flap and permanent SPC and adjuvant chemotherapy.

**MP 02-06**

Renal cell carcinoma in a patient with job’s syndrome: A rare case report


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Renal cell carcinoma accounts for approximately 90% of all renal malignancies and is one of the commonly encountered urological malignancy in association with genetic syndromes. Currently, about ten inherited cancer susceptibility syndromes are associated with inherited risk of kidney cancer with von Hippel Lindau disease, Birt Hogg Dube syndrome, Tuberous Sclerosis complex being the common types. Job’s syndrome or Buckley syndrome is an autosomal dominant variant of Hyperimmunoglobulinemia E syndrome (HIES), which is a heterogeneous group of immune disorder characterized by frequent episodes of eczema, and recurrent cutaneous and pulmonary infections along with raised serum IgE levels. In this report, we present a case of renal cell carcinoma (RCC) found in a 20 year old male with Job’s syndrome. There has been only one such documented association so far in the literature. Both HIES and RCC have an immunological basis for their pathophysiology and may involve common pathways. Further research and studies need to be performed to delineate any possible relationship with immunodeficiency disorders that has not yet been defined. Our findings present the need for careful consideration of RCC in immunodeficient patients especially among the ones with risk factors of RCC.

**MP 02-07**

A rare case of prostatic adenocarcinoma presenting as an isolated inguinal lymphadenopathy without pelvic lymph nodes

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Introduction: Prostatic adenocarcinoma (CaP) is the most common cancer in males and nearly 65% of patients present with metastasis, with regional lymphadenopathy and bone metast being the most common presentations. CaP metastasizing to inguinal lymph nodes in the absence of pelvic lymphadenopathy or other metastases is very rare. Case Presentation: A 70-year-old gentleman presented with isolated left inguinal lymphadenopathy of 3 months duration. There was no history of lower urinary tract symptoms, bone pain or cough with expectoration. Clinical examination revealed a 3 cm hard fixed left horizontal group of inguinal lymph node but did not reveal any abnormal findings with normal external genitalia and only an unsuspecting grade 1 smooth firm prostatomegaly. Investigations: CECT abdomen showed only mild prostatomegaly, FNAC of the lymph node revealed adenocarcinomatous deposits. Colonoscopy was done to rule out any colonic pathology and it did not reveal any abnormal findings. Serum PSA was done and was found to be elevated -159 ng/dL. Transrectal ultrasound biopsy revealed adenocarcinoma (Gleason score 3+4=7) and Multiparametric MR imaging showed prostatic nodules suggestive of CaP with seminal vesicles and bladder base involvement. Bone scan was done and was negative for any metastatic bone disease. Treatment: The patient’s clinical stage was pT4N0M1; bilateral subcapsular orchiectomy was carried out and patient was put on antiandrogen therapy (bicalutamide). Outcome and E syndrome (HIES), which is a heterogeneous group of immune disorder characterized by frequent episodes of eczema, and recurrent cutaneous and pulmonary infections along with raised serum IgE levels. In this report, we present a case of renal cell carcinoma (RCC) found in a 20 year old male with Job’s syndrome. There has been only one such documented association so far in the literature. Both HIES and RCC have an immunological basis for their pathophysiology and may involve common pathways. Further research and studies need to be performed to delineate any possible relationship with immunodeficiency disorders that has not yet been defined. Our findings present the need for careful consideration of RCC in immunodeficient patients especially among the ones with risk factors of RCC.

**MP 02-08**

Metastatic nonischemic priapism due to Ewing’s Sarcoma: A rare case report


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Introduction and Objective: Priapism is defined as full or partial erection persisting beyond four hours after sexual stimulation and orgasm. The term malignant priapism describes persistent, nonsexual erections caused by invasion of malignant cells into the cavernosal sinuses. Penile metastases commonly arise from the genitourinary tract, but due to Ewing Sarcoma has not been reported. we report this unique case to highlight the need for diagnosis and aggressive multimodality treatment to improve survival in these patients. Methods: A 03 yr male attended Urology OPD for persistent painless erection of penis for last 2 months with h/o coincidental trauma to the perineum. Patient had no difficulty in passing urine. On evaluation on Colour Doppler USG, high flow nonischemic priapism was found. In
Categorically enhancing expansile lytic mass lesion with soft tissue component originating from right bony pelvis, with contiguous tumoral infiltrative nodular soft tissue lesion (7.9x3.6x4.6 cm) in root and shaft of penis. In CT Thorax patient had multiple nodules in B/L lungs mostly metastatic nodules. Results: On L/E penis is soft, indurated, erect, non-tender with multiple nodules. In USG guided trucut biopsy from the bony pelvis soft tissue mass & penile corpora, it came to be Round cell tumor most probably Ewing’s Sarcoma. Patient was planned for chemotherapy, now symptomatically improved. Conclusion: Ewing’s Sarcoma rarely presents with malignant priapism. The prognosis and life expectancy in penile secondaries is poor, but in Ewing’s Sarcoma with malignant priapism & lung metastases early diagnosis & aggressive multimodality treatment can salvage these patients.

**MP 02-09**

**Lip metastasis secondary to extremely rare divergent differentiation in renal cell carcinoma**

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Introduction: Renal cell carcinoma present in 25% of patients with metastasis. The metastasis to the skin can present before the diagnosis of the primary site but are typically found after the initial primary tumor identification and management. Renal cell carcinoma commonly metastasizes to lungs, liver, bone, adrenal glands, and the brain. We present a case of Renal cell carcinoma with extremely divergent differentiation with lip metastasis. Case Summary: A 75 year man presented with swelling in upper lip. The patient had the history of Radical nephrectomy 3 months back with histopathology suggestive of positive margins with extensive Divergent histopathology. The histopathology included predominantly sarcomatoid histopathology, some areas of squamoid differentiation, and few foci of osteosarcoma with osteoid producing cells. On examination, the patient was having a palpable lump in the abdomen. The wedge biopsy was taken from the lesion from the upper lip and CECT abdomen was done. Biopsy suggestive of a sarcomatoid variant of Renal cell carcinoma from lip. CECT abdomen was suggestive of recurrence in the right renal fossa. The patient started on Pazopanib however the disease progressed and the patient started on everolimus. Conclusion: Divergent histopathology of Renal cell carcinoma is a highly aggressive variant. In spite of radical treatment, these patients have the dismal prognosis. The response of tyrosine kinase inhibitors is poor. Lip metastasis is a very rare presentation of Renal cell cancer with only a few case reports. In conclusion, surgery is the first option when treating RCC patients with multiple metastases.

**MP 02-10**

**Perineal angiomyxoma masquerading as a erectile corporeal body swelling: A case report**

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A 44-year-old male noticed a painless swelling in the perineum, gradually increasing in size over 4 months. Swelling became prominent with erection and vigorous physical activity. On physical examination there was a firm, non tender, non pulsatile, irreducible, non compressible mass in the anterior perineal area, on the left of the raphe. Patient underwent imaging with subsequent CEMRI that revealed a T1 hypointense and markedly T2 hyperintense lesion (4.6 x 2.5 x 5 cm) midline in relation to corpus spongiosum, with progressive enhancement on dynamic contrast. USG guided FNA from mass was suggestive of a nerve sheath tumour. Patient underwent excision of the mass. Histopathology of excised specimen revealed angiomyxoma of anterior perineal triangle positive for desmin, smooth muscle actin, muscle-specific actin and vimentin. After 3 months follow up, patient is asymptomatic with no signs of recurrence. Perineal Angiomyxomas especially in males (M:F-1.6:1) are extremely rare with around 150 overall reported cases till date. MR imaging is current gold standard in imaging with lesions usually hypo-intense on T1 weighted, hyper-intense on T2 weighted and a whorled appearance after contrast. The trademark of aggressive angiomyxoma is vascularity of variable calibre dispersed irregularly throughout the parenchyma with occasional mitotic figures. To the best of our knowledge this is the first reported case of angiomyxoma of the anterior perineal triangle in a male, presenting with prominence of perineal swelling with penile erection masquerading as a swelling arising from corporeal bodies.

**Introduction:** The gastrointestinal stromal tumor (GIST) originates from the intestinal cell of Cajal, an intestinal pacemaker cell in the gut. These cells are known to express the KIT gene (detected as the cluster of differentiation [CD]117 antigen), which is important for distinguishing GIST from other mesenchymal neoplasms. The extra-Gastrointestinal stromal tumors (EGISTs) that originate primarily outside the gastrointestinal tract are relatively rare soft tissue neoplasms and are known to arise from various anatomic sites, such as the omentum, mesentery, retroperitoneum and gall bladder. To the best of our knowledge, there have been only five cases of primary prostatic EGISTs reported in literature. Giant prostate defined as weighing more than 500 g may also be a rare presentation of benign prostatic hyperplasia or prostatic neoplasm. In our case, the prostate was massively enlarged measuring 1230 cc, the second largest reported prostate in world literature. GIST should be considered in cases of prostatic tumors with a spindled or epithelioid morphology, and immunohistochemistry and possible molecular studies are recommended to aid in diagnosis and guide treatment decisions. Surgery remains the standard treatment for primary resectable EGISTs. Whenever possible, complete en bloc removal of the tumor and the surrounding organs that are involved is required. The available methods include radical prostatectomy, cystoprostatectomy and total pelvic exenteration. Conventional chemotherapy and radiotherapy are ineffective in the treatment of EGISTs and GISTs, whereas Imatinib mesylate, a tyrosine kinase inhibitor of c-kit, and PDGFRA as methods of adjuvant therapy, have been proposed as treatment for advanced, unresectable and metastatic GIST. Case Report: A 75 year old male presented to us with acute urinary retention for 1 day and voiding LUTS for last 6 months. He had episode of coronary artery disease 5 years back for which angioplasty was performed elsewhere. A digital rectal examination revealed hugely enlarged hard lobulated prostate with rectal intraluminal protrusion and bimanually palpable suprapubic hard lump. The prostate specific antigen (PSA) level was 12.3 ng/ml; serum carcinoembryonic antigen (CEA) was 3.2 ng/ml. The other laboratory investigations were unremarkable. Computed tomography (CT) showed a hugely enlarged homogeneously enhancing prostate filling whole of the pelvic cavity and measuring 16.3x12.5x11.5 cm (1230 cc volume) with lost fat plane with anterior rectal wall. Further evaluation with sigmoidocolonoscopy revealed large anterior mass measuring 12 cm, fixed to rectal mucosa and filling 90% of rectal lumen. TRUS guided 12-core prostate biopsy was suggestive of spindle cell neoplasm consistent with extra-gastrointestinal stromal tumor. The immunophenotype, morphology, and molecular findings are most consistent with a primary prostatic EGIST. The patient is planned for radical prostatectomy with Imatinib adjuvant therapy in due course after pre-anesthetic fitness and surgical optimization. Conclusion: The patients presented with a “giant prostate”, EGIST should be considered in the differential diagnosis. The current case presents an extremely rare case of EGIST arising from the prostate and considered to be aggressive tumors in behaviour. The radiological imaging, histopathology, immunohistochemistry and possible molecular studies are usually required to diagnose the primary prostatic EGIST. Surgery and adjuvant tyrosine kinase inhibitors (Imatinib mesylate) remain the standard treatment for primary resectable EGISTs.

**MP 02-12**

**Outcome of partial nephrectomy for stage T1 renal cell carcinoma: An initial experience**


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Introduction: Renal cell carcinoma (RCC) is a highly aggressive variant. In spite of radical treatment, metastasis is a very rare presentation of Renal cell carcinoma with only a few case reports. In conclusion, surgery is rarely the first option when treating RCC patients with multiple metastases.

**MP 02-11**

**Primary gastrointestinal stromal tumor of prostate with an unusual presentation as a giant prostate (1230 cc): A case report and review of the literature**

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**Objectives:** The gastrointestinal stromal tumor (GIST) originates from the intestinal cell of Cajal, an intestinal pacemaker cell in the gut. These cells are known to express the KIT gene (detected as the cluster of differentiation [CD]117 antigen), which is important for distinguishing GIST from other mesenchymal neoplasms. The extra-Gastrointestinal stromal tumors (EGISTs) that originate primarily outside the gastrointestinal tract are relatively rare soft tissue neoplasms and are known to arise from various anatomic sites, such as the omentum, mesentery, retroperitoneum and gall bladder. To the best of our knowledge, there have been only five cases of primary prostatic EGISTs reported in literature. Giant prostate defined as weighing more than 500 g may also be a rare presentation of benign prostatic hyperplasia or prostatic neoplasm. In our case, the prostate was massively enlarged measuring 1230 cc, the second largest reported prostate in world literature. GIST should be considered in cases of prostatic tumors with a spindled or epithelioid morphology, and immunohistochemistry and possible molecular studies are recommended to aid in diagnosis and guide treatment decisions. Surgery remains the standard treatment for primary resectable EGISTs. Whenever possible, complete en bloc removal of the tumor and the surrounding organs that are involved is required. The available methods include radical prostatectomy, cystoprostatectomy and total pelvic exenteration. Conventional chemotherapy and radiotherapy are ineffective in the treatment of EGISTs and GISTs, whereas Imatinib mesylate, a tyrosine kinase inhibitor of c-kit, and PDGFRA as methods of adjuvant therapy, have been proposed as treatment for advanced, unresectable and metastatic GIST. Case Report: A 75 year old male presented to us with acute urinary retention for 1 day and voiding LUTS for last 6 months. He had episode of coronary artery disease 5 years back for which angioplasty was performed elsewhere. A digital rectal examination revealed hugely enlarged hard lobulated prostate with rectal intraluminal protrusion and bimanually palpable suprapubic hard lump. The prostate specific antigen (PSA) level was 12.3 ng/ml; serum carcinoembryonic antigen (CEA) was 3.2 ng/ml. The other laboratory investigations were unremarkable. Computed tomography (CT) showed a hugely enlarged homogeneously enhancing prostate filling whole of the pelvic cavity and measuring 16.3x12.5x11.5 cm (1230 cc volume) with lost fat plane with anterior rectal wall. Further evaluation with sigmoidocolonoscopy revealed large anterior mass measuring 12 cm, fixed to rectal mucosa and filling 90% of rectal lumen. TRUS guided 12-core prostate biopsy was suggestive of spindle cell neoplasm consistent with extra-gastrointestinal stromal tumor. The immunophenotype, morphology, and molecular findings are most consistent with a primary prostatic EGIST. The patient is planned for radical prostatectomy with Imatinib adjuvant therapy in due course after pre-anesthetic fitness and surgical optimization. Conclusion: The patients presented with a “giant prostate”, EGIST should be considered in the differential diagnosis. The current case presents an extremely rare case of EGIST arising from the prostate and considered to be aggressive tumors in behaviour. The radiological imaging, histopathology, immunohistochemistry and possible molecular studies are usually required to diagnose the primary prostatic EGIST. Surgery and adjuvant tyrosine kinase inhibitors (Imatinib mesylate) remain the standard treatment for primary resectable EGISTs.
**MP 03-02**

Effect of penile low intensity shock wave therapy in selected patients of erectile dysfunction: An interim analysis

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Introduction: Low intensity shock wave therapy holds promise in restoring natural erection but there is paucity of evidence which can guide a physician for the number of shocks and sessions of therapy used for optimal benefit to a patient. Aims and Objectives: To evaluate overall efficacy of single shockwave treatment of LiSWT in vasculogenic erectile dysfunction patients (cardiovascular and Diabetic patients). Materials and Methods: This study was done as a pilot project from Jan 2017 to Jan 2018. A total of 15 patients were included out of 120 patients of erectile dysfunction attending the Andrology OPD. All the patients were diabetics and 80% had concomitant Coronary Artery Disease. All patients had previously PDS inhibitors with inadequate response. In all cases the IIEF 5 scores were recorded pretreatment. We offered these patients with a short aggressive therapy protocol of weekly LiSWT for 3 weeks with adjuvant Tadalafil 5 mg for 4 weeks. Three sessions one week apart, total 14400 shocks were given (5000-5000-4400). A Wolfe piezoelectric machine was used in all the patients. Post treatment IIEF 5 scores were recorded at 3, 6 and 9 months. Results: Mean age was 59 +/- 10.3 months. Mean ED Duration was 65 (36-84) months. 12/15 patients had cardiovascular disease and 15/15 were diabetic. Mean initial IIEF ED domain score was 11 (6-13). Based on changes in IIEF-ED domain scores, 60% of all males had a significant clinical improvement after 6-9 months. Conclusion: In this study we found that LiSWT – 3 cycles of weekly treatment amounting to 14400 shocks resulted in satisfactory enhancement in the IIEF from 11 to 19 at a mean follow up of 9 months in this group of patients.

**MP 03-03**

A rare case of Zinners syndrome presenting as LUTS in young adult managed laparoscopically

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Introduction: Seminal vesicle cysts producing lower urinary tract in males are uncommon. Zinners syndrome is a rare triad of Congenital seminal vesicle cysts with ipsilateral megalourethra and ejaculatory duct obstruction. Less than 100 cases have been reported in literature. Small seminal vesicle cysts are usually asymptomatic, whereas the larger cysts will cause lower urinary tract symptoms in form of Voiding difficulty, recurrent UTI, Hematospermia, pain while ejaculation and preineal pain rarely. Methods: We present a 45-year-old man who suffered from voiding difficulty and irritating voiding symptoms since 1 year. He had two episodes of UTI, treated with antibiotics. Patient was married and having two children. Digital rectal examination revealed a palpable large cystic mass behind the prostate. Uroflowmetry showed Maximal and average flow rate 12 m/sec and 4 ml/sec respectively. RGU was normal. Diagnostic imaging showed a right seminal vesicle cyst with an intravesical protrusion. The ipsilateral kidney and ureter were absent. We had performed Laparoscopic Right seminal vesiculectomy. Patient is in follow up. Results: Patients symptoms were relieved & the maximal and Average urinary flow rates increased from 12 to 18 mL/s and from 4 to 10 mL/s, respectively. Conclusion: We advocate Laparoscopic approach for managing Symptomatic large Seminal vesical cyst.

**MP 03-04**

Unusual variant of zinzer syndrome presenting as cause of infertility in young male

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Introduction and Objective: Mesonephric duct in male is paired developmental organ that develops mainly into trigone, bladder neck, part of urethra, seminal vesicle, vas deferens and epididymis. The ureretic bud initially develops as outpouching from the mesonephric duct. So, congenital developmental organ that develops mainly into trigone, bladder neck, part of urethra, seminal vesicle, vas deferens and epididymis. The ureretic bud initially develops as outpouching from the mesonephric duct.
malformations of the accessory reproductive organs may be associated with abnormalities of upper urinary tract. We present here, an unusual variant of zinner syndrome comprising of unilateral renal agenesis, ejaculatory duct obstruction and large intra-prostatic cyst. Materials and Methods: 32 years old male patient came with inability to conceive since 5 years. On further enquiry, he revealed orgasmic anejaculation. On examination we found high testes and spermatic cord was normal. Ultrasound examination showed absence of right kidney. Unable to find out cause of anejaculation, we did Magnetic Resonance Imaging of pelvis. It revealed large intra-prostatic cyst with dilatation of right seminal vesicle. Post coital urine showed presence of sperms. Trans-urethral management of prostatic cyst was planned. Cystoscopy showed a large obstructing intra-prostatic cyst. Ureteroscope was introduced into the cyst through the seminal colliculus. The cyst was filled with calculus presumed to be formed from the obstructed semen. They were fragmented using laser and evacuated by giving per-recctal prostatic massage. The cyst was left open for drainage. Results: On 6 weeks follow-up, patient was able to achieve ejaculation. Conclusion: Developmental anomalies of urogenital system should be considered while evaluating a case of primary infertility. Appropriate imaging should be done for accurate diagnosis of mesonephric duct abnormalities.

**MP 03-05**

**A study of effect of combing buprenorphine to bupivacaine during spinal anaesthesia on rate of erection in patients undergoing uro-endoscopic procedures**

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Objective: To study the effect of combing buprenorphine to bupivacaine during spinal anaesthesia on rate of erection in patients undergoing uro-endoscopic procedures. Materials and Methods: 25 randomly selected patients of the age group of 20 to 40 years needing uro endoscopy who received spinal anaesthesia with bupivacaine alone (group A) were compared with 25 randomly selected patients needing uro endoscopy receiving spinal anaesthesia with bupivacaine mixed with varying doses of buprenorphine (group B) with regard to the presence or absence of erection immediately after recieving spinal anaesthesia. Results: 20 of the 25 patients in group A had erection where as only 1 of 25 in group B had erection (p<0.05). Conclusion: Addition of buprenorphine to bupivacaine in spinal anaesthesia has significant advantage of reducing the possibility of erection in uro endoscopic procedures. Its use in other surgeries where erection can hinder the proper surgery (such as urethroplasty) and also its use in treatment of priapism needs to be explored.

**MP 03-06**

**Prospective comparative study between virtual reality and fruit tissue (Apple) based TURP simulator**

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Purpose: TURP is commonly performed surgery for benign prostatic hyperplasia, purpose of study to compare that which model is more beneficial to an urosurgeon for learning and development of skill. Materials and Methods: 13 residents and urosurgeons with variable level of skill and experience in TURP performed TURP on simulator and Apple model independently. Operative time and adequacy of channel were noted by independent observers. Subjective experience was noted using a set of questionnaire. Standard statistical comparison was done to find out which technique fared well. Results: Mean operative time in Simulator model was 22.54 min and for Apple model was 21.85. Adequacy of channel in both model have no significant difference. There were no significant difference in mean operative time, and variety of scenario and model preparation. In Apple model trainee experience is better for tissue feel and overall assessment (p<0.005). Trainees also have more resemblance of real life TURP after training in Apple model then Simulator (Likert scale mean score 2.69 vs 4.00, p <0.005), however Simulator have significant better control of bleeding (Likert scale mean score 3.96 vs 2.71, p < 0.005). Conclusion: Simulator have significant better control of bleeding but other factors like realistic resemblance to real life TURP and tissue feel in Apple model makes it a better model for training.

**MP 03-07**

**Comparative analysis of safety and efficacy of silodosin and silodosin + bethanechol for trial with out catheter in a patient with acute urinary retention**

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Introduction: AUR is an urological emergency in men and requires urgent catheterization. In the absence of internationally agreed outcome measures for the success of a trial without catheter, success was defined as the return to satisfactory voiding without need for re-catheterisation within 24 hours. Alpha blockers relax prostatic smooth muscle cells thereby improve urinary symptoms. Bethanechol is a muscarinic agonist with no nicotinic effects used to increase smooth muscle tone in urinary retention in the absence of obstruction. Methods: This prospective study will be conducted over 120 patients with AUR due to BPH. Patient having large median lobe, prostate size > 100 ml, with recurrent UTI, gross hematuria, renal insufficiency, suspected carcinoma prostate, neurogenic bladder, holding > 800 ml urine, and any bladder or urethral disease were excluded, patient who were catheterized but were not on alfa blocker therapy, were categorized into three equal groups, given placebo, silodosin and silodosin with bethanechol. Voiding trial given after three days of therapy. And successful case were assessed with uroflowmetry. Results: The received drugs were well tolerated by patients and none of them have discontinued the prescribed drugs. The incidence of successful catheter free voiding trial was significantly higher in the combined treatment group compared to SILIDOSIN AND PLACEBO group. Among those who had a successful voiding, peak flow rate were also significantly better in combined group. Conclusions: Patients with AUR due to BPH can be treated safely with a combination of SILODIN and BETHANECHOL to get a better success rate.

**MP 03-08**

**Detrusor preleak point pressure: A more reliable parameter to predict the risk to the upper urinary tracts?**

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Detrusor Leak Point Pressure (DLP) is a relatively established urodynamic parameter to predict the risk to the upper urinary tracts in patients of Neurogenic Bladder Dysfunction. However the parameter is not sufficiently standardised till date. Besides there are potential technical errors in its measurement due to the presence of urodynamic pressure catheter in the urethra during measurement. We at our centre, have designed a method of measuring the leak point pressure by withdrawing the catheter at the point of leak with a constant rate. The leak pressure measured at this point is the natural bladder pressure to which the upper urinary tracts are exposed to prior to leakage. We called this pressure Detrusor Preleak Point Pressure (DLP). Measuring both DLP and DLP in 42 consecutive patients of Neurogenic Bladder Dysfunction, we are able to correlate our findings to the upper tract damage and suggest revised parameters to predict the risk to the renal function in these cases. DLP is thus a new parameter. However when used in conjunction with other important parameters like total detrusor compliance, urethral pressure and leak point difference, we can increase accuracy in prediction of the upper urinary tract deterioration in patients with neuropathic bladders.

**MP 03-09**

**Role of laparoscopic unilateral nephrectomy in the treatment of refractory nephrogenic hypertension: A case series**

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Introduction: Hypertension affects millions around the world. In selected cases of renal disease, nephrectomy may allow adequate BP control.
Advancement of laparoscopic nephrectomy may lead to decreased morbidity and faster recovery. Materials and Methods: Patients referred to us have been treated for hypertension for more than 3 years. Indication for nephrectomy was uncontrolled hypertension with recurrent UTI or poorly functioning kidneys. Total of 5 patients underwent laparoscopic nephrectomy. Pre-operative BP was 165 ± 35 mmHg systolic and 102 ± 29 mmHg diastolic. 3 patients were on three and 2 were on four antihypertensive medications. Results: Mean blood loss was 50 ml, mean operative time 120 min and mean hospital-stay 2.5 days. HPE of nephrectomy specimens showed renal atrophy due to chronic hydronephrosis in 3 patients, nephroclerosis in 2 other patients. Postoperatively, blood pressure was 121 ± 9 mmHg systolic and 72 ± 6 mmHg diastolic in 3 patients who stopped all antihypertensive. 2 patients had partial response with reduction in the number or the dose of antihypertensive medications. There were no complications and no conversion to open surgery. Conclusion: Patients with unilateral renal abnormality and hypertension may benefit from early nephrectomy, to reduce the morbidity from high blood pressure and hypertensive medication. Before the advent of minimally invasive surgery, nephrectomy was a major undertaking with some patients left with a large scar and having still to take antihypertensives (partial or non-responders), however patients need to understand the surgical risks as well as small risk of failure to treat hypertension.

MP 03-10
46, XX, SRY negative phenotypic male with infertility: An uncommon case
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Introduction: One of the rare chromosomal causes of disorder sex development (DSD) is the 46-XX karyotype. Most such men are SRY gene positive which explains their male phenotype. Male phenotype with absence of SRY gene is extremely uncommon and most such men have ambiguous genitalia. We report two cases of 46-XX DSD who were SRY negative but had normal male phenotype. Methods: Two men aged 27 and 28 years presented with infertility to our tertiary care hospital. They had mature male external genitalia with descended but small testes, sparse body hair and bilateral mild gynecomastia. Semen analysis showed azoospermia. Serum FSH was elevated in both the cases with low testosterone. Ultrasound abdomen and pelvis did not reveal any masculinizing derivatives. A chromosomal analysis and genetic screening was ordered. Results: G-banding karyotypic analysis revealed a pure 46 XX pattern in both the patients. Molecular studies showed that both patients were SRY gene negative. Y chromosome was absent and thus AZFa, AZFb and AZFc regions microdeletion tests were positive. Genetic and psychological counseling was done for both the patients and testosterone supplement started in consultation with endocrinologist. Donor insemination was advised for fertility. Serial self examination with regular gonadal USG was advised to check risk of malignancy. Conclusion: 46 XX DSD with SRY negative is a very uncommon cause of male infertility. These subjects may be raised as females due to normal external genitalia. Screening for katyotype is indicated, followed by screening for remnants of Mullerian ducts and for malignant transformation in dysgenetic gonads.

MP 03-11
Revisiting penile venous ligation: A case report with review of literature
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Introduction: Erectile dysfunction (ED), inability to achieve and maintain penile erection sufficient to perform sexual intercourse is present in varying degrees in 52% of population. One of the most common types of vascular ED is corporoveno-occlusive dysfunction (CVOD) also known as venogenic ED. This usually does not respond to phosphodiesterase inhibitors and has a poor response to intracavernosal injection therapy. Penile venous ligation is a fair option to treat this condition. Hussain et al reported a success rate of 90.4% with venous ligation in their well selected patient group. Case Report: A 20 years old male presented with primary erectile dysfunction, having never experienced penile erection. All secondary sexual characters, genitalia and libido were normal. He did not respond to phosphodiesterase inhibitors and underwent three failed attempts of intracavernosal pharmacostimulation. He was normotensive, non smoker with no history of any penile trauma or radiation. Parameters (blood sugar, testosterone, prolactin, leutenising hormone, serum creatinine, lipid profile) were normal. His post pharmacostimulation penile Doppler determined PSV of 59 cm/s, EDV of 10 cm/s with RI value 0.82, indicating venous leak, confirmed by cavernosogram showing leak at dorsal vein and crural veins. Stripping of deep dorsal vein with ligation of circumflex and crural veins with crural plication was performed. At follow up of one year patient had good rigid penile erection. Conclusion: Although, most guideline panels criticise long term results, penile venous ligation after identifying and confirming the venous leak is a viable option for young patients with primary venous leak.

Moderated Poster Session 4: Uro Oncology, Transplantation and Miscellaneous

MP 04-01
Management of a rare case of pelvic solitary fibrous tumour: Combined approach using Da Vinci Xi Robotic System
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Introduction: Solitary Fibrous Tumours, first described in 1870 by Wagner, are tumors of mesenchymal origin of unknown etiology. They usually occur in the extremities. The term SFT is favored by soft-tissue pathologists to describe a rare, heterogeneous group of benign and malignant neoplasms along a morphologic continuum. Malignant forms exhibit hypercellularity, mitotic activity (~4/10 hpf), cytologic atypia, tumor necrosis, inflammatory margins. Metastasis is usual cause of death and occurs via hematogenous route to lungs. Methods: Sixty four year old male presented with a history of obstructive LUTS since one year. Examination revealed a bimanually palpable pelvic mass and digital rectal examination showed hard, nodular mass not separately palpable from prostate. MRI showed large heterogeneous mass in retroprostatic space with loss of surrounding fat planes. CT guided biopsy revealed extrapeural SFT and whole body PET-CT showed no metastasis with mass’s SUV max 9.4. Patient then underwent Robot assisted pelvic dissection converted to open abdomino-perineal tumour resection (due to dense adhesions and bleeding from pelvis) on 9/11/17. Abdominal drain was removed on POD4 and patient was discharged on POD7. Results: Biopsy revealed SFT without any malignant features with negative margins. - On follow-up MRI after 3 months, no recurrence was noted. Conclusion: Extraracvic SFT is a rare disease. - During minimally invasive approach for pelvic tumours, if excessive adhesion/bleeding is encountered, then a combined abdomino-perineal approach gives good result including complete tumour excision and acceptable cosmesis.

MP 04-02
Transitional cell carcinoma in cross fused renal ectopia: A rare entity
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Introduction: Cross fused renal ectopia is a rare congenital anomaly, with incidence of 1:300 to 1:7600. Its association with malignancy is extremely rare, with Renal Cell Carcinoma being most frequent tumor type. Very few case reports of its association with TCC is published. Case Description: A 72 years old male presented with left flank pain and hematuria with normal renal function. CT scan showed right retroperitoneal mass not separately palpable from prostate. MRI showed large heterogeneous mass in retroprostatic space with loss of surrounding fat planes. CT guided biopsy revealed extrapeural SFT and whole body PET-CT showed no metastasis with mass’s SUV max 9.4. Patient then underwent Robot assisted pelvic dissection converted to open abdomino-perineal tumour resection (due to dense adhesions and bleeding from pelvis) on 9/11/17. Abdominal drain was removed on POD4 and patient was discharged on POD7. Results: Biopsy revealed SFT without any malignant features with negative margins. - On follow-up MRI after 3 months, no recurrence was noted. Conclusion: Extraracvic SFT is a rare disease. - During minimally invasive approach for pelvic tumours, if excessive adhesion/bleeding is encountered, then a combined abdomino-perineal approach gives good result including complete tumour excision and acceptable cosmesis.

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and fused ectopic position. Conclusion: Laparoscopic nephroureterectomy can be done safely with prehensive vascular anatomy in experts hand.

**MP 04-03**  
**Migrated double J stent into inferior vena cava and right atrium**  
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Introduction: Ureteric stents are widely used in urologic practice since its introduction. Ureteric stent has got various complications like stent syndrome, encrustations, urinary tract infection. Case: Presenting here a 55 years old female presented with pain in the right side of abdomen for 1 year with history of right pyelolithotomy and DJ stenting one year ago. Imaging evaluation revealed the presence of DJ stent in right renal vein. IVC and right atrium with impaired right renal function. Patient underwent right simple nephrectomy and DJ stent was extracted. During operation DJ stent was found in the right renal vein. Conclusion: Intracardiac migration of DJ stent is a rare phenomenon. DJ stent should be employed under fluoroscopic or ultrasound guidance to prevent such complications. No standard modality of treatment for intracardiac migration of DJ stent. It can be managed endovascular, percutaneous or open approach.

**MP 04-04**  
**A rare cause of ascites: Spontaneous urinary bladder rupture**  
Tushit Rai, Vinegh Manoharan, Giridharn Singh Bora  
PGIMER, Chandigarh, India

Case Summary: Thirty two year old male presented with fever, loss of weight and appetite from last one month and abdominal distension from last seven days. On evaluation, he was diagnosed with tubercular ascites with gastrointestinal tuberculosis. In view of left hydronephrosis and persistent ascites after treatment, he was reevaluated and was diagnosed with spontaneous urinary bladder rupture which was managed with per urethral catheterization and intraperitoneal drainage. This case report emphasize on rare cause of ascites secondary to spontaneous bladder perforation.

**MP 04-05**  
**Recurrent giant vesical calculus**  
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Introduction: Though urolithiasis is a common problem worldwide, vesical calculi are rare. Giant calculus weighing more than 100 gm are very rare. We report a case of recurrent giant vesical calculi with b/l HDUN in a young male. Case Details: A 35 year old male with a past history of open cystolithotomy in 2014 for vesical calculus, presented to us with complaints of strangury, dysuria, intermittency for past 3 months. There were no features of neurogenic bladder or outlet obstruction. On evaluation he was found to have a large vesical calculus of size. USG also showed b/l mild HDUN. There was no calculus in the upper tracts. But his creatinine was 1.1 mg/dl. Calcium, Phosphorus, Uric acid, Sodium, iPTH and Vit D were all within normal limits. Urine routine examination showed few pus cells. Urine culture was sterile. We did an extraperitoneal open cystolithotomy. The bladder was thickwalled. Stone was broken into fragments using chisel and hammer keeping deavers retractor inside the bladder as counterbalance mechanism to avoid injury to the bladder wall. The removed fragments weighed 493 gm. SPC and PUC were removed after 3 weeks and the patient is voiding well at present. Conclusion: Patients can develop Giant vesical calculi even in the absence of secondary causes. Complete clearance is the key for prevention of recurrence. Early detection by surveillance will avoid the unnecessary morbidity.

**MP 04-06**  
**Role of thrombectomy in the salvage of arteriovenous fistula: Does timing of intervention influence the outcome?**  
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Introduction and Objective: In general, a blood flow of 500 ml/min and a diameter of at least 4 mm are a prerequisite for an AVF to support dialysis therapy. Thrombosis is one of the common cause for AVF failure. The aim of this retrospective study is to review our experience in surgical salvage of failing AV fistulas by adoption of thrombectomy in appropriate circumstances. Methods: Between Jan 2017 to Jan 2018, 18 patients underwent surgical thrombectomy. Out of 18, 10 were radio-cephalic, 7 were brachio-cephalic and 1 was brachio-basilic AV fistula. The time between the diagnosis of thrombosis and admission to the operative suite were recorded. The patients were divided into two groups based on intervention time (Group 1 <24 hours and Group 2 >24 hours) and the outcomes were assessed. The mean operative time was around 122 minutes. The main outcome measure was technical success rate. Results: A total of 10 patients underwent thrombectomy in Group 1 and 8 patients in Group 2. Successful recanalization was achieved in 90% (9/10) in Group 1 and 37.5 % (3/8) in Group 2. These fistulas were successful to cannulate at 6 months follow up. Conclusion: Surgical salvage of thrombosed AV fistulas by thrombectomy should be strongly encouraged to be performed early (preferably within 24 hrs of thrombosis). Attempt for thrombectomy should also be considered even beyond 24 hours as the fistulas can be salvaged successfully in one third of cases.

**MP 04-07**  
**An intresting case of hematuria**  
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Introduction: Hematuria per se is not a disease, it is regarded as symptom if gross & sign if microscopic. Retroperitoneal non-hodgkin’s lymphoma is extremely rare cause of hematuria. Due to uncommon anatomical location, diagnosis and subsequent management of these patients tend to be difficult. Case Report: A 62 yrs/Male, came with C/O hematuria which was painless, intermittent with clots since 5 month. He had no other voiding symptoms /pain abdomen / fever. We proceeded with cystoscopy, clot evacuation and bilateral ureteroscopy. Operative findings were active bloody efflux from left ureteric orifice and multiple clots in left ureter & Pelvicyclicaal system, vascular ectatic lesions around papillae with active bleeder. CT abdominal angiogram showed retroperitoneal mass infiltrating right kidney & renal vessels, with IVC thrombus. Finally diagnosis was made as lateralising hematuria from left kidney due to renal venous hypertension & identified cause was retroperitoneal non-hodgkin’s lymphoma involving right kidney with IVC thrombosis. We did bilateral DJ Stenting and chemotherapy (R-CHOP regimen) was started. Conclusion: Basic goal in dealing with a case of hematuria is to recognize and confirm finding of hematuria & Identify common etiologies. Renal vein hypertension (pressure gradient of > 4 cmH2O between the IVC & renal vein) have been documented as a rare cause of gross hematuria. Increased venous pressures may result in communications between forniceal venous sinuses & terminal branches of minor calyces causing hematuria. While managing case of hematuria, in conditions associated with abnormal clinical/laboratory/imaging, treatment may be necessary, as appropriate, with the primary diagnosis.

**MP 04-08**  
**Synovial sarcoma of kidney with IVC thrombus – Case report and review of literature**  
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Introduction: Synovial sarcoma is a very rare type of soft tissue sarcomas affecting the extremities commonly. They are also reported in lungs,
It is possible to give total continence with rigorous preoperative PFME, adequate preservation of length of urethra and continued postoperative exercises. Nerve preservation, bladder neck preservation, musculo-fascial reconstruction and SF resulted in earlier continence.

MP 04-10
Robotic vs open renal transplantation - match pair analysis
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Introduction: Renal transplantation (RT) is recognized treatment for end stage renal disease. With advent of robotics, there is growing interest for robotic RT. Although significant literature of robotic RT is now available, studies comparing open vs robotic transplant is lacking. We present match pair analysis of open vs robotic RT. Materials and Methods: We retrospectively reviewed casesheets of patients who underwent RT from 2013 to 2017. 12 patients with BMI ≤22 kg/m² who underwent robotic RT included in robotic arm. 12 patients with open renal RT were matched for demography, body mass index (BMI), comorbidities and native kidney disease. Variables assessed were operative time, total ischemia time, haemoglobin drop, nadir creatinine at 1 month and complications. Results: Mean operative time was 293.6±65.06 minutes in robotic arm and 253.6±18.178 minutes in open arm. Total ischemia time in robotic arm was 116.4±23.47 minutes and 67.36±23.11 minutes in open arm. Haemoglobin drop was 1.15±0.82 gm/dl in robotic arm and 1.82±0.86 gm/dl in open arm. Nadir creatinine at 1 month was 1.39±0.376 mg/dl in robotic arm with 1.39±0.96 mg/dl in open arm. 2 patients from robotic arm had perigraft collection treated conservatively. Three patients from open arm developed wound infection. Conclusion: Except total ischemia time all other variables were comparable. None of arms had vascular complications. Robotic arm patients had no wound complications. None of the studied parameters affected long term graft outcomes at 1 year followup. We conclude that robotic modality is non inferior to open surgery for RT, though long term prospective comparative studies need to be done.

MP 04-11
Primary synchronous malignancy with concordant genitourinary malignancies: A review of 7 cases
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Introduction: Metachronous malignancies are common in urological practice. Synchronous dual primary malignancies are unusual. They are usually considered to be a metastasis from the other. The purpose of this manuscript is to highlight the fact that such synchronous malignancies though rare in occurrence, should always be kept in mind while treating these patients. Materials and Methods: A retrospective study was done in all patients who presented to our urology department and diagnosed to have synchronous double malignancies, of which one malignancy in all patients was in genitourinary tract. We report a series of such patients who had dual primary malignancies. Results: Seven patients presented with synchronous double malignancies with each having a primary from genitourinary tract. One had ipsilateral renal cell carcinoma (RCC) and contra-lateral Transitional cell carcinoma of the renal pelvis. Another patient had unilateral RCC and Sigmoid colon adenocarcinoma. Third patient presented with a uterine endometrial carcinoma along with a RCC. Other 3 patients had carcinoma prostate with huge hilar renal mass in one, adenocarcinoma of colon in the second and squamous cell carcinoma of hypopharynx in the third patient. A 50-year-old female who had ureteral tumour and uterine carcinosarcoma was the highlight of our series. Conclusion: It is well known that individuals who have developed one malignancy are at greater risk of developing the second. Two malignancies of different histology occurring at the same time is a rarity. A strong index of clinical suspicion, adequate imaging and multidisciplinary treatment is necessary in such cases.
MP 04-12
Additional anaesthesia techniques prior to transrectal prostate biopsy- do they really help
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Purpose: PSA screening has led to significant rise in transrectal ultrasound guided prostate biopsies. Most common anaesthesia technique before prostate biopsy is the Perioperative nerve block (PPNB). Patients still have significant peri procedural pain and discomfort limiting the number of biopsies. We compared PPNB, PPNB plus periaxial block and PPNB plus 2% rectal lidocaine gel instillation for better peri procedural pain and discomfort control Materials and Methods: From January 2017 – June 2018, a total of 70 patients underwent trans rectal ultrasound guided prostate biopsies. They were randomized into 3 groups- 25 patients received PPNB, 25 patients PPNB plus periaxial block and 20 patients PPNB plus rectal lidocaine gel instillation. A Visual analog scale was used to asses peri procedural pain. Results: Mean visual analog pain scores were 2.4 for PPNB group, 2.3 for PPNB plus periaxial group, 2.1 for PPNB plus rectal lidocaine gel per group. Peri procedural pain was least for PPNB plus lidocaine group but no statistically significant difference was seen in all the three groups. Conclusions: PPNB is standard prior prostate biopsy. Additional apical infiltration did not improve patient discomfort further. The combination of PNB plus rectal gel provided better peri procedural analgesia compared to other groups. However, no statistically significant difference was found between any of the methods.

MP 05-01
Extended boari flap for management of complete avulsion of ureter from vesioureteric junction: A case report
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Introduction: Ureteral avulsion during ureteroscopy is a challenging condition. Occurs in 0.06–0.45% of patients. Inappropriate management of ureteral avulsion often leads to undesirable complications. We report a case of post ureteroscopy lower ureteric complete avulsion with ischemic lower & middle part of ureter repaired by extended Boari flap technique. Materials and Methods: 30 yrs male diagnosed to have ureteric avulsion while undergoing ureteroscopy for impacted upper third 12 mm ureteric calculus. PVPN kept that time. 4 weeks later patient came to us with PCN insitu. Preop routine haematological & urine test were normal. CT urography done showed complete avulsion of lower end of ureter with upper ureteric calculus in situ. Left ureteric orifice not seen properly at Cystoscopy. Capacity urinary bladder was normal. Exploration by modified Gibbon incison done. Impacted upper uretercal calculus removed. Urethral & ischemic middle & lower part of ureter excised & extended Boari flap created & upper normal part of ureter anastomosed to upper end of Boari flap & rest of flap tuburalized with 5-o vicryl. DJ kept. Results: Toal operative time 3:30 hrs. Insignificant blood loss. Drain removed on 4th POD. PCN removed on 8th POD. Patient discharged on 8th POD. DJ removed after 6 weeks. At the time of DJ removal, left RGP & Diagnostic URS done showed good caliper left entire ureter without stricture or leakage. Post procedure IVP done showed normal renal function without hydronephrosis. Conclusion: Repair of complete ureteral avulsion following endoscopic surgery is a challenging task which should be tailored according to the individual situation. Boari flap is a versatile technique in the repair of severe ureteral defects.

MP 05-02
Management of complex uretero-pelvic junction obstruction in the robotic era: An algorithmic approach
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Introduction: Uretero-pelvic junction obstruction (UPJO) occasionally present with complex problems such as giant hydronephrosis (HDN), atypical ureteropelvic anatomy, unavailable ureter (long segment ureteric strictures/ previous ureteric anastomosis) and secondary UPJO. We aim to present an algorithmic approach in management of these patients along with our experience in robotic repair of complex and atypical UPJO. Materials and Methods: From 2015 to 2018, 7 cases (8 renal units) such cases were operated robotically by a single surgeon. Four patients with giant HDN underwent “Santosh-PGC” tubularized flaps pyelovesicostomy in 5 renal units. One patient with giant HDN in a solitary kidney with multiple secondary calculi underwent calicovesicostomy. Another female underwent robot assisted boari flap calicovesicostomy following failed robotic ureterocalicostomy for secondary UPJO. A young female with long segment upper ureteric calculus underwent ileocalycostomycostomy. All patients were drained pre-operatively by percutaneous nephrostomy (PCN) and the anastomosis were tubularized over a 16 Fr Foley’s catheter placed suprapubically. The mean operative time was 180 minutes with an average blood loss of 100 ml. Results: All patients demonstrated good gravity dependent drainage with no leak or narrowing. On a follow-up period ranging from 4 months to 3 years, all patients are asymptomatic with no worsening of renal function. The patients were advised double voiding and are on regular follow up. Conclusion: The advent of robotic surgery has made complex reconstructions for the management of complex and atypical UPJO feasible and simple with minimal morbidity. A wide gravity dependent drainage forms the basis of these repairs.

MP 05-03
Recurent large urethral stones in case of scrotal skin flap urethroplasty: A nightmare
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Introduction: The initial era of urethral reconstruction had witnessed wide use of scrotal skin flap for augmentation urethroplasty. Its use fell out of practice owing to multiple complications. Currently use of buccal mucosa is the standard of care for urethral augmentation. However, it’s not rare to find patients with scrotal skin graft urethroplasty done in 1980’s. Our Case: We report a case of post traumatic sticture augmentation urethroplasty done using scrotal skin flap. Patient had undergone endoscopic urethral stone removal 10 years back. He now presented with perineal pain. Investigations revealed a large stone (~4 cm) in diverticulum of reconstructed bulbar and membranous urethra. Patient underwent excision of diverticulum and hair bearing skin with removal of the stone.

MP 05-04
Record breaking calculi in neo bladder – 2 case report
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Introduction: Bladder stone formation in orthotopic neo bladder is known delayed complication 2 patients who under went radical cystectomy and orthotopic neo bladder substitution 10 & 14 years back. Devolved calculi of 750 gms and 1125 gms is presented. Giant vascual calculus weighing more then 100 gms is a rare entity. The largest cascal calculus is of 6294 gm reported by arthure et al. we reported 2 cases of bladder calculi weighing 750 gms and 1125 gms. Case Report: 64 years male underwent radical cystectomy and orthotopic bladder substitution in 1994 presented with suprasvesical mass investigation revealed huge vesical calculus. open surgical procedure carried out to remove the stone. It weighed 750 gms and 2nd patient 62 years old who underwent the same procedure 10 years back. He was having recurrent dysuria, X-Ray shows huge bladder calculi. Stone removed by cystolithotomy. It weighed 1125 gms. Discussion: Radical cystectomy and orthotopic neo bladder reconstruction is well established surgical procedure for Ca Bleder. Stone formation is known late complication. However both patients reported huge multiple calculi with minimal clinical signs. Bio chemical parameters of the patients were normal. Open cystolithotomy was the only choice. Post operative catheter was removed after 2 weeks they are now stone free from last 5 years. Conclusion: Giant bladder calculi are rare. Such big stone are much rarer. However stone formation in neo bladder is a known complication.
**MP 05-05**

**Modified cantwell-ransley repair for isolated continent epispidias in adult: A rare case report**

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Introduction: Isolated epispidias with continence is a very rare entity comprises less than 10% of all epispidias cases. Reported incidence is 1 in 11,700 cases. In adult it is extremely rare since such anomalies are treated surgically in childhood. Surgical repair in case of adult epispidias remain an challenge to all reconstructive surgeon. Many surgical procedures have been described for the repair of which Modified Cantwell-Ransley procedure has become procedure of choice. So I would like to present this rare case report of an isolated continent epispidias in adult.

**MP 05-06**

**Paraurethral leiomyoma: A histological surprise**

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Introduction: Paraurethral mass includes an extensive list of pathologies arising from structures of both of urologic and gynecologic origin. They range from asymptomatic to a severely impacted quality of life. Examples include urethral diverticuli, vaginal wall cysts (including Skene’s gland cysts), urethral prolapse/caruncles, and urethral leiomyoma. If symptomatic, surgical excision of the mass is typically undertaken with the procedure performed dictated by the pathology. Here we are describing an incidentally found paraurethral leiomyoma in a middle age women. Case Report: A middle aged women was referred to urology clinics for a mass per vagina. Patient complained of difficulty in passing urine and decreased urinary stream. Examination noted a 4 cm x 3 cm, ovoid mass protruding from the vaginal introitus adjacent to urethral meatus. The mass was non tender to palpation and urethral opening was seen on the left side of the mass. Patient underwent USG of abdomen & pelvis which was normal. Patient was posted for urethrocystoscopy & excision of mass. Procedure was uneventful and there was no urinary disturbance post operatively.

Discussion: Paraurethral leiomyomas are a rare cause of periurethral masses and often grouped in studies with other smooth muscle tumors of the lower urinary tract. Urethral and paraurethral leiomyoma make up just 5-7% of periurethral masses. Surgical resection requires detailed knowledge of location of the mass and female urethal anatomy to facilitate dissection and reconstruction of urethra.

**MP 05-07**

**A case of distal hypospadias masquerading as megameatus intact prepuce**

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Hypospadias is an abnormality in which the urethral opening is ectopically located on the ventrum of the penis as far down as in the scrotum or perineum. It occurs in 1 to 300 live births. Classic hypospadias is characterized by the triad of ventral urethral defect, absence of dorsal prepuce and choree. A megameatus with intact prepuce (MIP) is an unusual variant of an anterior hypospadias that accounts for 3% of hypospadias repairs. It is characterized by a widely spayed coronal or subcoronal meatus, a deep glanular groove, a normally formed prepuce, and no choree. We here report a case which was diagnosed as MIP clinically but found to be a hypospadias intraoperatively.

Keywords: Choree, hypospadias, megameatus with intact prepuce

**MP 05-08**

**Mullerianosis of the urinary bladder in a patient with Mayer-Rokitansky-Küster-Hauser Syndrome: A rare case report**


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Introduction and Objective: Mullerianosis is a very rare and complex tumor-like lesion, composed of at least two out of three Mullerian tissues such as endometrial, cervical, and tubaric. This is very rare in patient with Mayer-Rokitansky-Küster-Hauser syndrome. The rarity of this lesion may cause misdiagnosis, its correct identification is tremendously important for appropriate management, since patients may benefit from hormonal therapy. Methods: A 20 year old unmarried lady presented with complaints of cyclical hematuria with mild abdominal pain for past 7 years, with absence of normal menstrual flow. Patient had not attained menarche with no known bleeding disorder. Abdominal examination was normal and per speculum examination showed blind vagina. Cystoscopy showed a 3x3 cm raised papilliferous area in the posterior wall of bladder. On diagnostic laparoscopy, B/L rudimentary uterine horns were present, it horn attached to UB wall, cervix not visualised, proving it to be MRKH syndrome. Results: Histopathological examination of the transurethrally resected bladder biopsy specimen revealed endometrial glands and stroma along with endocervical type of glands and glands lined by ciliated cells in the bladder. These findings indicate that the bladder lesion was mullerian in nature with endometriosis, endocervicosis and endosalpingiosis. Postoperatively patient was treated with medroxyprogesterone. The patient was asymptomatic on follow up. Conclusion: High index of suspicion with proper imaging modalities and extensive histologic evaluation will lead to the diagnosis of mullerianosis. Correct diagnosis is of great value to patients who do not want to undergo surgery primarily because it is responsive to hormonal therapy.

**MP 05-09**

**Quality of life in patients with perineal urethrostomy**

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Introduction and Objective: Perineal Urethrostomy (PU) provides temporary or definitive solution to stricture urethra, in patients in whom other reconstructive procedures fail. This study evaluated the quality of life in patients treated with perineal urethrostomy for urethral stricture disease. Methods: Retrospective study included 190 patients who underwent perineal urethrostomy using flap technique over a period of 15 years (2003 to 2017) as part of staged urethroplasty repair for complex anterior urethral stricture or permanent urethrostomy as initial surgery. A questionnaire was used to evaluate the quality of life and satisfaction. Outcome was considered failure when postoperative instrumentation was needed. Median follow up period was 60 months. Results: Etiology was unknown in 45.2% cases, lichen sclerosis 18.8%, catheter 15.2 %, and miscellaneous 20.8%. Of 190 patients, 102 underwent prior failed urethroplasty. PU success was seen in 74 patients (72.54%) and failure in 28 patients (27.46). 88 patients didn’t undergo any prior urethroplasty and PU success was seen in 64 patients (72.7 %). A total of 27 PU were failures, requiring postoperative instrumentation or revision of perineostomy. AUA score pre and post-surgery was Mild 21 to 156; Moderate 45 to 28; and severe 12 to 13 respectively. SHIMS scores pre and post-surgery for Mild ED, Mild to Moderate ED, Moderate ED, Severe ED were: 11 (22.91%), 16 (28.08%), 25 (52.08%), 29 (50.87%); 7 (14.59%), 7 (12.28%); 5 (10.42%), 5 (8.75%) respectively. A total of 151 patients were satisfied with surgery and 143 refused to undergo second stage of urethroplasty. Conclusions: Perineal Urethrostomy is a satisfactory procedure for complex anterior urethral stricture.

**MP 05-10**

**Study of different technique of ileal neobladder**

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Today, the goals of urinary diversion have developed from simply diverting the urine and protecting the upper urinary tracts. Contemporary objectives of urinary diversion should include a form of reconstruction which provides a safe and continent means to store and eliminate urine, with efforts to improve the quality of life of the individual. We performed ileal orthotopic neobladder using highmann technique in 47%, Camey 2 in 35% and Studer in 18%. In our study, we found that all three reconstruction techniques can be safely performed in men and women with acceptable morbidity and good functional outcome. Early complications were noted.
Scientific Abstracts - USICON 2019

K. Senthil, M. Ramalingam, N. Sivasankaran
Laparoscopic excision of seminal vesicle tumour

Introduction and Objective: Seminal vesicle cyst excision in laparoscopy is technically demanding more so when there is a tumour in situ. We illustrate the technique of excision of seminal vesicle cyst. Methods: 47 year old male presented with irritative LUTS. His digital rectal examination revealed a globular mildly tender prostate. Ultrasound showed a cystic lesion in the retroprostatic region. MRI showed seminal vesicle cyst with no infiltration of adjacent structures. Laparoscopy showed well defined cystic lesion involving the right seminal vesicle burrowing into the prostatic capsule. With meticulous dissection excision of the cyst in to was achieved. Results: Patient had smooth recovery and voided with a better stream. Histopathology revealed unusual cystic mixed epithelial and stromal tumour. Conclusions: Meticulous dissection in laparoscopy is essential for a complete removal of seminal vesicle cyst.

UMV 02
Ureteroscopy and stone

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The past century has seen a continuous development of the URS along side diversification of its use. Current American and European urology Association stone guidelines summarised the current evidence base for treatment for stone size and location. The position of the stone in ureter directly reflect in success procedure. More distal stone have highest success rate when treated with rigid ureteroscope compare to the more proximal stone. Indeed proximal stone can fall back into kidney therefore they often required a concurrent flexible ureteroscope to achieve good stone free rate.

UMV 03
Isolated congenital penile torsion repair

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Penile torsion can be a congenital, or an acquired lesion after trauma, circumcision or urethral reconstruction. Congenital penile torsion occur in association with hypospadias, Congenital chordee, Hooded prepuce or as a single deformity. It might be due to abnormal skin attachment, or abnormal development of the dartos fascia that causes disorientation of the penile shaft and corporeal rotation around its longitudinal axis. The penis is almost always rotated to the left (counter-clockwise). The severity of the deformity is based on the degree of glanular angulation into mild (<45o), moderate (45-90o) or severe (>90o). The indication for interventions are cosmetic and functional. Deformities greater than 60o should be considered for corrective surgery in the absence of associated hypospadias or chordee. We present a case of 6-year-old child with isolated moderate degree of congenital penile torsion towards left side (counter-clockwise). Penile degloving with complete urethral mobilization and dorsal dartos flap was done.

UMV 04
Retroperitoneal nephrectomy – A single centre experience

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Introduction: Nephrectomy is indicated for benign as well as malignant conditions of the kidney. Be it simple, radical or partial. In our series from Jan 2005 to Jan 2018 a total no of 140 patients underwent a nephrectomy of which 120 by the retroperitoneal and 30 by the transperitoneal approach. Materials and Methods: standard approach and ports for retroperitoneal nephrectomy were made. The advantages with the transperitoneal approach easily recognizable anatomy, larger working space, better visibility. Results: The retroperitoneal nephrectomy was made in 1 year follow up. No anaemia, Blood loss 96 ml, oral intake 26 min, drain removal, blood transfusions etc. The success rate for retroperitoneal approach were 115/120 (95%). Conclusion: To conclude Laparoscopic nephrectomy should be considered the 1st line treatment option for all simple nephrectomies. we prefer retroperitoneal route with shorter operative time, less dissection needed, direct access to renal vessels, decreased risk of visceral injury and early commencement of oral feeds.
**UMV 05**

Safety and efficacy of superior calyceal access versus inferior calyceal access for pelvic and lower calceal stones

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Introduction: Percutaneous nephrolithotomy (PCNL) is the treatment of choice for large renal stones. The success of PCNL is highly related to optimal renal access. Two approaches are commonly employed to gain access to the stones located in the pelvis and lower calyceal access which consist of superior calyx approach or inferior calyx approach. Superior calyceal puncture being more difficult and more demanding have relatively few studies presented. Aims and Objectives: This prospective study was carried out to evaluate the effectiveness and safety of superior calyceal versus inferior calyceal puncture for the removal of pelvic and lower calyceal stones. Materials and Methods: A total of 126 patients underwent PCNL for stones in pelvis and lower calyceal were studied. Sixty three of them underwent inferior calyceal, while 63 underwent superior calyceal puncture. The two approaches were compared as per total duration of surgery, intraoperative blood loss, infundibular/ pelvic tear, rate of complete clearance and rate of postoperative complications (pulmonary, bleeding, fever and sepsis). Results: In our study, the success rate was 65.54% for those in the Inferior, 78.95% for those in the superior calyceal access group. Thoracic complications (hydrothorax) occurred to 1 patient in superior calyceal access group. Bleeding requiring blood transfusion happened to 8 patients in inferior calyceal access and 1 in superior calyceal group. Conclusion: We conclude that superior calyceal puncture is a feasible option minimizing lung/pleural rupture and gives a better clearance rate. We suggest that there should not be any hesitation for superior calyceal puncture in indicated patients.

**UMV 06**

Use of rigid nephroscope in open pyelolithotomy in the PCNL era– A video presentation

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Introduction: We describe our experience of using a rigid nephroscope for extracting inaccessible calculi during open pyelolithotomy. Materials and Methods: (1) A 28 year patient with a single kidney with a complex partial staghorn calculus, extending from a long, deep inferior calyx was planned for open pyelolithotomy. Intra operatively, due to an intra renal pelvis, exposure of the calyces was very poor. As a bail out procedure, a mini nephroscope was introduced and the stones were cleared, with use of pneumatic lithotripsy included. (2) A post bariatric surgery patient with mini nephroscope was introduced and the stones were cleared, with use of pneumatic lithotripsy included. Background and Objectives: The purpose of this study was to present strategies for performing robotic assisted pelvic surgery in the morbidly obese patient. Methods: This was a prospective, institutional review, descriptive feasibility study conducted at a tertiary hospital. Seven morbidly obese patients with a body mass index of 40 kg/m² or greater were selected to undergo robotic-assisted surgeries. Robotic-assisted pelvic surgery like vesicovaginal repair, ureterovaginal fistula repair, robotic radical prostatectomy were done. Results: The median estimated blood loss was 250. The mean length of stay in the hospital was 5 days and the complication rate was 9%. The rate of conversion to laparotomy was nil. The median surgical time was 210 minutes. Conclusion: Robotic-assisted surgeries is a safe and effective method of performing pelvic in select morbidly obese patients, allowing them the opportunity to undergo minimally invasive surgery without increased perioperative complications.

**UMV 07**

Robotic uretero-ureterostomy for proximal ureteric stricture in adult: A new add in robotic armamentarium

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Introduction: Ureteric stricture is a complication of ureteroscopy with incidence ranges from 0.5-3.5%. This data increases with use of dormia basket for impacted stones extraction. Objective of this case study is to demonstrate that Robotic technology is one of the alternative for dealing with such cases. Materials and Methods: A 35 yr old male reported with left 1.9 cm upper ureteric stricture, at L-4 level with moderate hydronephrosis. Patient underwent Left ureteroscopic stone extraction, 9 month ago. Dormia stone basket entrapment injury happened during stone extraction, open ureteric repair done over double j stent. In follow up patient has to undergo re stenting thrice, whenever stent was removed because of acute loin pain. Patient diagnosed as a case of proximal ureteric stricture and posted for robotic ureteroureterostomy. Patient was placed in 60º flank position with the ipsilateral arm positioned on the side of the patient. Five ports were placed in a straight line configuration lateral to the rectus muscle and the robot was docked. After colonic mobilization ureterolysis was done done strictured segment recognised and excised After spulation of ureteric ends ureteric anastomosis was done with interrupted sutures over double j stent. Results: Patient withstood the procedure well without any complications. Operative time- 5 hours including console time Estimated Blood loss- 70 ml, drain removed after 3 days. Patient was discharged after 5 days the Double j stent removal was done after 6 weeks. Patient is asymptomatic in his follow-up of 6 months post operative renal us scan on fourthmonth is showing subsidence of ureteropelvic dilatation. Conclusion: Robotic ureteroureterostomy is a feasible and safe surgical option for the proximal ureteric stricture repair.

**UMV 08**

Robotic assisted surgeries pelvic surgery in obese patients

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Background and Objectives: The purpose of this study was to present strategies for performing robotic assisted pelvic surgery in the morbidly obese patient. Methods: This was a prospective, institutional review, descriptive feasibility study conducted at a tertiary hospital. Seven morbidly obese patients with a body mass index of 40 kg/m² or greater were selected to undergo robotic-assisted surgeries. Robotic-assisted pelvic surgery like vesicovaginal repair, ureterovaginal fistula repair, robotic radical prostatectomy were done. Results: The median estimated blood loss was 250. The mean length of stay in the hospital was 5 days and the complication rate was 9%. The rate of conversion to laparotomy was nil. The median surgical time was 210 minutes. Conclusion: Robotic-assisted surgeries is a safe and effective method of performing pelvic in select morbidly obese patients, allowing them the opportunity to undergo minimally invasive surgery without increased perioperative complications.

**UMP 01**

Ureterectomy in a female child with ectopic ureter with a single system- presenting as an ureteric abscess post nephrectomy: A case report

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The incidence of ectopic ureter is 1 in 1900 in pediatric age group. 80% are associated with a duplex collecting system. In females the upper moiety generally opens in the urethra or the vestibule distal to the external sphincter. Prenatal diagnosis is possible via ultrasound. Numerous cases with duplex collecting system which were managed by upper pole nephrectomy are there in past literature. We hereby present a case report for ureterectomy done for ureteric abscess in case of single ectopic ureter. 4 month old female child antenatally diagnosed to have hydronephrosis presented with fever with chills. Dtpa scan was suggestive of nonfunctioning kidney. Left sided pcn gram was done which had minimal output. Intraop pcn gram was suggestive of ectopic ureter with opening into urethra. Left nephrectomy was done. Patient recovered well and
was discharged. After 14 months child presented with fever, tenderness, warmth and swelling just below the left flank incision. Ultrasonography was suggestive of abscess in the retroperitoneal perireticular region 62 x 50 mm size extending into the muscular plane. CT was suggestive of tortuous ureter with periureteric collection and internal echoes. Ureteroscopy revealed ectopic ureteral opening in urethra with scope not negotiable beyond distal ureter. Incision and drainage of the subcutaneous abscess with interval left ureterectomy was done. Patient had uneventful post op recovery. Single ectopic ureters can present as a diagnostic dilemma which may require ureterectomy in addition to nephrectomy.

**UMP 02**

**Genitourinary tuberculosis – The biggest masquerader**

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Introduction and Objective: Genitourinary tuberculosis (GUTB) is the second most common extrapulmonary tuberculosis. Despite all the technological advancements, the diagnosis of tuberculosis remains clinical mostly. We present a case of delayed diagnosis of GUTB and its attendant complications. Methods: A 33 years old male had presented elsewhere in 2013 with recurrent urinary tract infection. Investigations revealed non-obstructive bilateral hydronephrosis with no vesicoureteric reflux (VUR). Cystoscopy did not reveal organic bladder outlet obstruction. Urodynamic study was suggestive of small capacity poorly compliant bladder. Patient was diagnosed as non-neurogenic dysfunctional voiding and managed with alpha-blockers and antimuscarinics. Later patient developed subacute intestinal obstruction in October 2016, was diagnosed as abdominal tuberculosis and started on antituberculous treatment. During follow-up in May 2017, serum creatinine was 1.5 mg/dl; imaging revealed bilateral hydroureteronephrosis with marked cortical thinning and a complex cystic lesion in rectovesical pouch. Diuretic renography revealed a non-functional left kidney and hydronephrosis of right kidney with subnormal cortical function. Cystoscopy, retrograde pyelography and cystogram revealed small capacity bladder with patulous right ureteric orifice, obliterated left ureteric orifice and grade 5 passive VUR on right side. Results: Patient underwent Laparotomy, adhesiolysis of the extensive small bowel adhesions, drainage of pus from rectovesical pouch and bladder augmentation of thimble bladder. Postoperative recovery was uneventful and presently patient is on clean intermittent catheterization with a bladder capacity of 300 ml. Conclusion: GUTB has remained one of the greatest imitations of all times. A very high clinical suspicion is required to promptly diagnose and treat GUTB, thus avoiding the myriad complications.

**UMP 03**

**Postoperative pancreatic fistula after left cytoreductive nephrectomy**

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Introduction and Objective: Pancreatic injury during nephrectomy is a rare complication with a reported incidence of 2.1% in laparoscopic left radical nephrectomy. It has not been described in the setting of cytoreductive nephrectomy and we present one such case. Methods: A 61 years old male presented with gross, total, painless hematuria. Imaging revealed a large upper polar left renal mass with ill-defined fat planes with tail of pancreas, distal spleen and left adrenal gland, along with multiple bilateral lung nodules and mediastinal lymph nodes. Patient underwent left cytoreductive nephrectomy through flank approach and intraoperatively found to have a large upper polar left renal mass, closely abutting the tail of pancreas. Results: On 5th postoperative day, there was spontaneous expulsion of the retroperitoneal drain, two days after which patient developed serous discharge of about 25-30 ml per day from the drain site which later became purulent associated with high grade fever. Imaging revealed bulky tail of pancreas and fluid collection in the surgically bed tracking down to drain site. Drain fluid amylase and lipase were raised and culture grew Pseudomonas. Patient was managed with pigtail drainage of the collection, culture sensitive antibiotics and subcutaneous injection of octreotide. Patient improved gradually and drain was removed on 80th postoperative day with no adverse events. Conclusion: Conservative management of postoperative pancreatic fistula after nephrectomy in the form of drainage of retroperitoneal collection, antibiotics, somatostatin analogues, discontinuing oral diet and total parenteral nutrition is successful in 30-50% of cases. Intervention in the form of endoscopic sphincterectomy, prosthetic restoration of Wirsung’s duct, fistulojejunostomy or resection of tail of pancreas is required in recalcitrant cases.

**UMP 04**

**Forgotten ureteral stents: Single stage management**

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Introduction and Objectives: Ureteral stents are an integral part of urological practice. However, stents that migrate, fragment or are forgotten pose a management and legal dilemma and often require multiple procedures for removal of these retained ureteral stents. We present our series of retained ureteral stents which were successfully managed. Methods: Our series consists of 5 patients with duration of forgotten stents varying from 1 yr to 7 yrs. Of the forgotten stents 2 (40%) were calcified, 1 (20%) were fragmented, and 2 (40%) were non-calcified. Procedures to render the patient stent-free were cystoscopic laser lithotripsy, ureteroscopy and percutaneous nephrolithotomy 2 (40%), ureteroscopy and percutaneous nephrostomy in 1 (20%) and cystoscopic double J stent removal in 2 (40%). Results: 3 patients had complex retained ureteral stent, 2 calcified and 1 fragmented. These patients were managed successfully with single sitting of procedure without any significant post-operative morbidity or mortality. Non-calcified retained ureteral stent managed successfully with cystoscopic removal. Conclusions: Forgotten ureteral stents can be managed successfully with single stage procedure. Stent registry and computer based reminder system can prevent such complications.

**UMP 05**

**Correlation between clinical outcome and residual prostatic weight ratio after transurethral resection of prostate for benign prostatic hyperplasia – A prospective study**

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Background: The Aim of the study is to determine whether the residual prostatic weight ratio has an impact on the outcome following TURP for Benign Prostatic Hyperplasia. The outcome is measured in terms of subjective parameters like improvement in IPSS system score and quality of life score and also objective parameters like peak flow rate on non-invasive uroflowmetry. Methods: The study is conducted in the Institute of Urology for the period from June 2017 to May 2018. Clinical history, examination, basic blood and urine examinations were done. Transabdominal USG was done and prostate volume is found using the standard ellipsoid formula and further the prostatic weight is calculated. IPSS questionnaire & Quality of life Score was done to obtain the subjective assessment of the patient symptoms. Patients with moderate and severe symptoms were taken up for the surgery. Uroflowmetry parameters like PFR, Mean flow rate & Post voidal residual urine were recorded. During surgery resection time was noted. Dry weight of the resected prostatic chips was measured by an electronic weighing machine. The residual prostatic weight ratio is calculated. The study group is separated to RPWR <50% & RPWR>50%. Patients were followed up after one month. IPSS score and QOL index was calculated for all patients. Uroflowmetry is also done. Statistical analysis is done using SPSS software. Results: 100 patients were taken up for the study. Group 1 with RPWR < 50% had 65 patients. Group II with RPWR > 50% had 35 patients. Mean age of patients is 64.52 in group 1 and 64.78 in group 2. Conclusion: The amount of tissue resected have a positive correlation with the clinical outcome. When the residual weight is less than 50%, the improvement in IPSS scores and PFR, subjective and objective measures of outcome is significant.

**UMP 06**

**Conservative management of renal artery pseudoaneurysm following percutaneous nephrolithotomy**

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Introduction and Objectives: Arterial injuries following percutaneous nephrolithotomy have been described rarely. Most injuries are detected and treated with surgery. However, there is an increasing trend towards non-surgical management. We present a case of pseudoaneurysm following PCNL. Methods: A 45 years old man with history of right loin pain and fever underwent PCNL. Post PCNL, patient developed nonfunctioning right kidney. He was taken for repeat PCNL on the same side with successful stone removal. PCNL was done with standard techniques under fluoroscopic guidance. Patient was discharged. After 14 months child presented with fever, tenderness, warmth and swelling just below the left flank incision. Ultrasonography was suggestive of abscess in the retroperitoneal perireticular region 62 x 50 mm size extending into the muscular plane. CT was suggestive of tortuous ureter with periureteric collection and internal echoes. Ureteroscopy revealed ectopic ureteral opening in urethra with scope not negotiable beyond distal ureter. Incision and drainage of the subcutaneous abscess with interval left ureterectomy was done. Patient had uneventful post op recovery. Single ectopic ureters can present as a diagnostic dilemma which may require ureterectomy in addition to nephrectomy.
Introduction and Objective: Percutaneous nephrolithotomy (PCNL) is a standard, safe, and efficient method for removing large renal calculi. Despite development of endourologic equipment, complications of the PCNL are still prevalent. The most important complication is haemorrhage. The haemorrhage may be either arterial or venous. Venous haemorrhage is usually treated conservatively whereas the arterial one might require trans arterial embolization. Methods: 24 years old male presented with intermittent left flank pain. NCCT KUB showed left renal pelvic calculus of size 19.7 x 10.7 mm with multiple small calculi left mid and lower calyx and 10 x 8 mm calculus in left mid ureter. Left supine PCNL with URSL done. On post-operative day 10, patient presented with clot retention after an episode of frank haematuria. CT renal angiography was performed which showed 5.8 x 4.3 mm pseudoaneurysm arising from lobar branch of left postero-inferior segmental artery without active extravasation of contrast. Haemoglobin was 11.8 gm/dl. Results: Patient vitals were stable all through the period of admission. So, conservative treatment was done with close monitoring of vitals and haemoglobin. The haematuria settled spontaneously after 72 hours and repeat imaging showed resolution of the pseudoaneurysm. No further interventions were undertaken and at the four month follow-up visit, no further episodes of haematuria had occurred. Conclusion: In a patient with bleeding from a renal artery pseudoaneurysm whose haemodynamic stable without a life threatening degree of haemorrhage, a trial of watchful waiting under close observation may allow for cessation of the bleeding without intervention.

UMP 09
Urethelial carcinoma presenting as gross hydroureter with secondary calculi: An unusual presentation
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Background: Renal stones associated with Squamous cell carcinoma are a common phenomenon. Renal stones with Gross hydroureter with underlying urethelial malignancy are a rare occurrence. We present one such rare case of Urethelial carcinoma, masquerading as secondary pelvi ureteric obstruction with impacted renal calculi and gross hydroureter. Case Scenario: A 65-year-old hypertensive male presented initially with symptoms of obstructive LUTS and one episode of macroscopic hematuria. USG revealed multiple left renal calculi with Hydroureter and moderate prostatomegaly. Uroflow revealed obstructive pattern. Computed tomography scan picked up an abrupt narrowing of upper ureter at L3 – L4 level. TURP was done first in view of bothersome symptoms. DMSA scan done 4 weeks revealed a salvageable kidney with a split function of 18%. Patient underwent Left PCNL & Double J stenting. Pyeloplasty was not contemplated in view of secondary PUJ and edematous PUJ. Three weeks later he presented with fever, loin pain and gross Hydroureter. Nephrostomy drained frank pus. He subsequently underwent nephrectomy. Biopsy report was suggestive of urethelial carcinoma. Conclusion: Squamous differentialtion is a much more common association with renal stone disease. Urethelial cancers involving pelvic pelvis and ureter are extremely uncommon in such a setting. To the best of our knowledge, this is the first ever case to be reported in Indian Literature. This case is presented for its rarity. A high index of clinical suspicion is imperative for the clinicians to make an earlier diagnosis of such uncommon associations and offer them an appropriate treatment.

UMP 10
Recurrent silent paraganglioma of urinary bladder: An extremely rare misdiagnosed clinical entity
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Introduction: Extra- adenral pheochromocytoma are known as paragangliomas. Bladder paragangliomas are extremely rare tumours with an incidence of 0.06% of all bladder tumours and accounting for less than 1% of all pheochromocytomas. The paraganglioma of the Urinary bladder are tumours of the Chromaffin tissue originating from the sympathetic innervations of the urinary bladder wall. Being functional in most cases they have characteristic presentation of hypertensive crisis and post micturition syncope. Case Report: Here we are presenting a case of such silent paraganglioma in a 66 year old female who presented with single episode of hematuria without any symptoms of catecholamine excess. She had extra vesical recurrence of tumor after 1 year of trans urethral resection of the primary tumor and underwent partial cystectomy and excision of the tumor. Conclusion: A silent presentation of a bladder paraganglioma is very unusual but quite dangerous as they are often misdiagnosed. The distinction of Paraganglioma from Urothelial Carcinoma is critical because
of differences in clinical management. Life-long follow-up is necessary to detect late recurrences. There is no consensus about the frequency of these measures; however, we suggest that there should be at least an annual follow-up for these patients if they are asymptomatic or whenever clinically indicated.

**UMP 11**

**Unusual presentsataion in metastatic ca bladder as skeletalmuscle involvement**

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High-grade papillary urothelial carcinoma usually invades the bladder wall, adjacent prostate, seminal vesicles, ureters, vagina, rectum, retroperitoneum, and regional lymph nodes. In advanced stages, it may disseminate to the liver, lungs, and bone marrow. On rare occasions, unusual metastatic foci like skin/heart/naïl have been reported in few case reports. The incidence of urothelial carcinoma has increased with associated rise in variants of urothelial carcinoma and unusual metastatic foci. It is imperative that urologists and pathologists are aware of the unusual variants and unusual metastatic locations to expedite the diagnostic process. Hereby we report an unusual case of secondary involvement of thigh/gluteal muscles by urothelial carcinoma. we found this on retrospective evaluation of muscle disease which was suspected to be polymyositis/muscle abcess. Patient had presentation of muscle stiffness, minimal lower urinary symptoms, difficulty in walking and was under evaluation of hip pathology.

**UMP 12**

**Nephron sparing surgery for large extra renal angiomyolipoma in 1st trimester of pregnancy**

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Neoplasms are rare in pregnancy; they present a challenge because of the special considerations and implications in treatment. Renal angiomyolipoma (AML) is a rare tumor that can be either sporadic or found together with tuberous sclerosis or pulmonary lymphangioleiomyomatosis. Renal AML when present were mostly reported in 3rd trimester and very rarely reported in 1st trimester. These tumors are hormone sensitive and therefore tend to grow during pregnancy and their main complication is the risk of rupture resulting in sometimes torrential hemorrhage. Optimal management still remains an enigma owing to scarcity of cases reported in literature. We report a large AML in a 27 year old lady, who presented in the 1st trimester of pregnancy. Owing to the size and risk of life threatening hemorrhage and high chances of Intrauterine death during anaesthesia, it was decided to terminate pregnancy after discussing with obstetrician. Case was managed by nephron sparing surgery.

**UMP 13**

**Advanced penile carcinoma: Management, complications and it's outcome: A case report**

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Introduction: Penile cancer is an uncommon malignant tumor, accounting for less than 0.5% of all cancers. Unfortunately, its incidence continues to increase in parts of Asia. The prognosis of advanced penile carcinoma is poor, especially in patients with more than 2 inguinal LN metastases. Mortality markedly increases when pelvic LN metastasis develops. Case Report: 50 years old male patient presented with fungating ulceration and necrosis of penis and scrotum. Incision biopsy s/o well differentiated scc. As there is involvement the scrotal skin and bulbar urethra involvement, total penectomy with radical cystoprostatectomy and PNLD and ileal diversion was done and also scrotectomy with b/l orchidectomy. On POD6 bowel leak suspected, patient was re-operated and ileostomy was done but now there was increased drain output. After confirmation right uretero-ileal anastomosis leak with contrast study and drain creatinine, right pcn was done. Drain decrease gradually and taken out. B/I, LND was done, meanwhile vac dressing applied over perineal wound after POD25 and perineal wound contracted after 10 days of vac therapy. Patient was on follow-up for 6 months and doing well and received chemotherapy. Discussion: Resection of lesions and repair of large area skin defects can dramatically improve quality of life, especially, that of patients with locally advanced disease without distant metastasis. Conclusion: We recommend multimodality therapy, but in some cases surgery could be performed firstly to improve quality of life.

**UMP 14**

**Penile fracture after priapism due to sildenafil ingestion:**

Out of frying pan into the fire

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A 36-year-old man presented to our department with complaints of swelling, pain and deformed penis for 2 days. He had a history of 100 mg Sildenafil ingestion following which he sustained a prolonged erection that persisted even after sexual intercourse. He tried vigorous masturbation to relieve it but he failed. After all this exercise, while he was sleeping, his child mistakenly fell over his erect penis following which he developed sudden severe pain in his penis and lost tumescence. On examination, he had a swelling and ecchymosis on right posteralateral aspect of his penis. There was no haematuria or blood at meatus. On the basis of history and physical examination, a diagnosis of penile fracture was made. Ultrasound revealed a tear in lateral wall of right corpora cavernosa with a large haematoma. Patient was taken for emergency exploration. Operatively, a defect of approximately 1 x 1 cm was visualised in lateral wall of right corpora cavernosa with a large overlying hematoma. Hematoma was evacuated and corporeal tear was repaired. Patient was followed up at 3 and 6 weeks. He sustained normal erections and there was no residual deformity. Penile fracture is a relatively rare condition, most frequently reported as a result of trauma during vigorous intercourse. Surgical repair, which was first done by Fetter and Gartman in 1936, is the most advocated treatment in this condition. PDE-5 inhibitors, which are nowhere described as a predisposing factor for penile fracture, proved to be one in this case.

**UMP 15**

**Kidney preservation in emphysematous pyelonephritis in 10 cases**

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Introduction: Emphysematous pyelonephritis (EPN) is a severe, necrotising infection characterised by the presence of gas in the renal parenchyma. Earlier, emergent nephrectomy was the treatment of choice depending on the grade of EPN and state of the patient. We present a case series of 5 patients of Grade 3 and Grade 4 EPN (Huang criteria) in whom the kidney was preserved. Methods: Patients who presented between March and June 2018 at a single hospital, who had EPN Grade 3 and above, who were diagnosed as having gas in the parenchyma of the kidney (EPN) radiologically, and whose kidneys were preserved were included in the study. Results: A total of 5 patients made the criteria. All were female and diabetic. The presenting symptoms were fever (100%), pain in the flank (100%), high pyuria (80%). Grade 4 EPN was present in 2 (40%), making a total of 7 kidneys. One patient (20%) required a perinephric drain for a collection. Two (40%) required ureteral stenting. All patients were treated by broad-spectrum antibiotics before culture- specific antibiotics could be started. Glycemic control was initiated. All patients survived and were discharged to follow-up. At mean follow-up for 4 weeks, all patients were doing well. Complete radiological resolution was demonstrated in 4/5 (80%) patients through CT scan. Discussion: Due to the wide availability of broad-spectrum antibiotics, CT scans, and intensive-care units, the conservative management of EPN can be done in selective cases. Kidney preservation should be a goal in most cases of EPN, considering that underlying diseases like Diabetes adversely impact kidney function in the long-run.
UMP 16
Management of penile fracture and follow up at 6 months
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Introduction: Penile fracture is the traumatic rupture of the tunica albuginea of the corpora cavernosa resulting from increased intracavernous pressure. The most common etiology of fracture of the shaft of the penis is trauma during sexual relations It could occur due to forceful manipulation, vigorous intercourse or masturbation, gunshot wounds, trauma that causes forcible bending of an erect penis. Sporadic reports of penile injury give the impression that it is rare; however, it is likely under-reported or hidden due to social embarrassment. Methods: The patient was found to present with intense local pain. On history patient recalled hearing a cracking (pop-up) sound, followed by rapid detumescence of the erect penis. Hematoma, bruising, and deformity (‘eggplant deformity’) of the penis followed. A palpable tunical defect with a ‘rolling sign’ are usually considered pathognomonic features for this condition. Managing penile fracture involves immediate surgical exploration by degloving incision, evacuation of the haematoma, and repair of the rent of the tunica albuginea.

Results: On 6 month follow up no unsatisfactory penile curvature, erection, stricture, fistula were noted. Conclusion: Penile fracture is a urological emergency necessitating prompt treatment. Although diagnosis is clinical, in occult injuries and concomitant urethral; injuries, imaging modalities like USG, MRI and RGU play an important role. Surgical correction is the treatment of choice and concomitant urethral injury should be diagnosed pre operative and repaired at the time of surgery. It is important to remember that in cases of fracture of shaft of penis, early intervention gives better outcomes.

UMP 17
Risk factors for urinary incontinence in patients undergoing holmium laser enucleation of prostate: Our experience with 50 patients
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Purpose: To investigate the factors associated with the occurrence of urinary incontinence after holmium laser enucleation of the prostate (HoLEP). Urinary incontinence is defined as a patient complaint of urine leakage, regardless of the type. Materials and Methods: From January 2017 to May 2018, 50 patients treated with HoLEP for benign prostatic hyperplasia were enrolled. Information regarding age, prostate volume, Patients had either of these- stress incontinence, urge incontinence. Or mixed incontinence were collected. Stastical analysis of data was done to look for the risk factors responsible for urinary incontinence after HoLEP. Results: Urinary incontinence after HoLEP occurred in 17 patients (34%), 13 patients of whom (77%) showed recovery within three months. Stress and urge urinary incontinence and postvoid dribbling occurred in 3 patients, 6 patients, and 8 patients, respectively. Age and total operation time were factors that significantly affecting the occurrence of urinary incontinence. Conclusions: Age and total operation time were associated with the occurrence of postoperative incontinence. Prostate volume was not a determining factor for incontinence. We suggest that a decrease in the occurrence of postoperative incontinence is possible by considering age in preoperative candidate selection, and also by reducing the operation time based on the development of operative skills and know-how.

UMP 18
Effect of drinking water composition in formation of renal stone: A retrospective study
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Purpose: Urolithiasis is a worldwide common problem and intake of adequate drinking water is the frequent advice of all treating physicians. Impact of drinking water composition in renal stone formation is a matter of debate in literature. Our study aims to address this issue to resolve to a more definitive inference. Materials and Methods: Data collected retrospectively from 30 consecutive renal stone follow-up patients, with respect to the stone composition, 24-hour urinary metabolite analysis and physicochemical analysis of the drinking water consumed daily since last 5 years. These parameters were analysed to find out any association between drinking water composition with renal stone formation. Results: Average age of stone formers is 40.8 years (range 20 to 58 years) with male to female ration 3:2. Calcium oxalate stones (71%) are the most common stones; however staghorn stones are common in females. Of the stone formers, 16 patients (53%) consumes soft or slightly hard water and 14 patients (47%) consumes moderate to very hard water. 66.6% and 80 % of the patients have low magnesium (< 30 mg/dl) and low calcium (< 75 mg/dl) level respectively in their drinking water. Overall 46.6 % patients have hypomagnesuria (< 75 mg/day) and 40 % of low magnesium water consumers have hypomagnesuria. Conclusion: Drinking water composition, particularly hardness of water does not have significant impact in stone formation. Low magnesium and low calcium level in drinking water may facilitate stone formation (particularly oxalate stones); however larger population multicentric study is required for validation.

UMP 19
Disseminated mucormycosis: Is it always fatal?
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Introduction: Mucormycosis is any fungal infection caused by fungi in the order Mucorales. The disease is often characterized by hyphae growing in and around blood vessels and can be potentially life-threatening in immunocompromised individuals. We present such a rare case who had a successful outcome. Case Report: This 60 year old diabetic was admitted with poorly controlled diabetes along with fever and cough along with progressive dyspnoea. Initially was suspected to have Pulmonary TB and was started on ATT. However during the hospital stay developed DKA and suspected Pulmonary embolism. While being managed for the same also developed AKI. A CT scan abdomen and chest revealed a Pulmonary fusiform aneurysms in apical segments of LLL and Rt lateral basal segment, Enlarged Lt Kidney with large perinephric collection, dilatation of PCS, proximal ureter with large non-enhancing area ?Infarct. FNAC from the kidney and the lung lesions confirmed disseminated Mucormycosis. He was started on antifungals to which the response was poor. A nephrectomy was then done to reduce the mucour load and surprisingly the patient responded to the surgery and with continued anti-fungals the lung lesions started regressing. Presently the patient has been discharged from the hospital and is on regular follow up. Discussion: Disseminated mucormycosis is often diagnosed late and is associated with high mortality. Management is prolonged and frustrating at times. Options have to be weighed against the risks. In our case, a thorough assessment and aggressive management resulted in a successful outcome.

UMP 20
Prostatic urethral transitional cell carcinoma: A case report
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Introduction: Transitional cell carcinoma (TCC) is a multifocal disease of the urinary tract that can also involve the prostatic urethra (PU). The exact incidence of primary involvement of the PU in patients with TCC is not well known. Bladder TCC may involve the prostate which may include urethral mucosa, ducts, acini, and stroma of the gland, which has been shown to affect the outcome. Risk factors for superficial urothelial cancer in the PU are high-grade, multifocal bladder TCC and presence of carcinoma in situ (CIS) in the bladder. Case Report: We report a case of a 65 year male patient, heavy smoker who presented to us with three episodes of terminal hematuria. Cystoscopy revealed a large papillary growth in the prostatic urethra. Resection of the lesion and biopsy showed low grade papillary TCC with deep chips showing presence of tumour cells. Completion resection was done in the form of TURP which did not show any residual
malignancy. Patient was given BCG immunotherapy and is on follow up without any recurrence. Discussion: Visible tumors of PU are easy to detect and resect but controversy exists regarding the optimal technique to treat prostatic urethral TCC. Currently, there is increasing recognition of conservative treatment options with intravesical agents like intravesical bacillus Calmette-Guérin (BCG) if there is superficial involvement of the PU. In high-risk patients or patients with prostatic stromal involvement, cystoprostatectomy is recommended.

**UMP 21**

**Bilateral renal oncocytoysis – A clinical surprise**

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Oncocytomas are benign renal neoplasms that are typically unilateral and single. Multiple and bilateral oncocytomas are rare and can have genetic association. We present a case of incidentally detected multiple large bilateral oncocytomas. A 69 year old woman was evaluated for right loin pain with associated generalised weakness and loss of appetite. Physical examination revealed bilateral loin masses which were ballottable. CECT revealed bilateral heterogeneously enhancing 9 cm mass lesions in the kidneys. Biopsy on the left kidney was suggestive of renal oncocytoysis. Oncocytomas are benign neoplasms that are often asymptomatic and diagnosed incidentally on imaging. They are rarely bilateral and multifocal, but when present they can be a part of genetic syndrome with limited differential diagnosis that includes tuberous sclerosis and Birt-Hogg-Dube syndrome. A coexisting renal cell carcinoma or a hybrid tumour can be present in some patients. The management of these patients include nephron-sparing partial nephrectomy in addition to close surveillance.

**UMP 22**

**Results of ventral onlay BMG urethroplasty for bulbar strictures – A retrospective, observational study**

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Introduction and Objectives: Urethral strictures most frequently occur at the bulbar urethra. When a bulbar stricture is encountered for the first time in a patient, a direct vision internal urethroctomy can be offered. When these patients want to be cured from their stricture disease, an operative approach has to be offered. It is probably better to offer this approach sooner than later. From a surgical point of view, less spongiosis will be found and from an economical point of view, early surgery is probably more cost effective. Objective of the study is to assess the success rates of ventral onlay BMG urethroplasty for bulbar strictures. Methods: This is a retro-prospective, observational study. Retrospective arm was from May 2012 to May 2016 and Prospective arm from May 2016 to June 2017. Preoperative workup of Prospective cases will be done with urine analysis, urine culture, Ultrasound abdomen with pre and post void volumes, Uroflowmetry, Retrograde Urethrogram (RGU) and Micturating Cystourethrogram (MCU) in all cases. Post Foley removal uroflowmetry, USG for pre and post void volumes was done. Subsequent follow up visit at 2 weeks after Foley catheter removal for Urine culture if earlier urine USG for pre and post void volumes was done. Subsequent follow up analysis, urine culture, Ultrasound abdomen with pre and post void volumes was done. Failure of surgery, which was predefined as need for any additional procedures, was seen in two cases. Both patients had proximal anastomotic recurrence Post VIU both patients had good flow and their urine became sterile. The success rate of the study was 95.2%. Conclusion: The ventral onlay should be considered for bulbar strictures because the ventral approach involves minimal mobilisation of the urethra and gives better exposure to the stricture segment.

**UMP 23**

**Cystitis glandularis maquerading as urinary bladder neoplasm**

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Background: Cystitis glandularis is a rare proliferative lesion of the bladder, usually caused by chronic irritation and inflammation. It is caused by the hyperplasia of the submucosa and proliferation of von brunn nests of the bladder. Though usually benign, it is considered to have some malignant potential. Our objective is to describe a case of cystitis glandularis in a 24-year-old male who presented as painless hematuria and was suspected to be bladder neoplasm on imaging. Methods: 24-year-old male, presented with difficulty in micturition, 2 episodes of hematuria. Laboratory investigation showed urine routine showed RBCs, with pyuria. Urine AFB was negative. Renal and coagulation test were normal. Abdominal ultrasound showed bilateral hydronephrosis with urinary bladder mass covering both Vesico-ureteral junction. Contrast enhanced Computer tomography scan suggested 2.3*2.15 cm urinary bladder mass posterior-inferiorly. Neoplastic etiology was suspected but there was no peri-vesical spread. TUR of bladder mass was done which was reported as cystitis glandularis. Patient was started on Tablet wysolone and is currently on follow up. Follow up cystoscopy showed no evidence of any similar growth in the bladder. Results and Conclusions: Cystitis glandularis is a rare condition which can present with lower urinary tract symptoms or as simulating bladder carcinoma with painless haematuria. While investigating it should be kept in mind. Cystoscopy and biopsy is often diagnostic. Lesions require resection while those with symptoms of UTI can be managed medically. Oral steroid have played an important role in remission. Long-term follow-up is required because of the malignant potential.

**UMP 24**

**A simple triple marker test for predicting outcome of medical expulsive therapy for distal ureteric calculus**


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Introduction: Symptomatic ureteric stones cause surrounding inflammation and edema promoting obstruction. C-reactive protein (CRP), white blood cell (WBC) count and neutrophil percentage (NP) tend to rise after an inflammatory response. Factors predicting stone passage during medical expulsive therapy (MET) can help in decision making regarding early intervention decreasing morbidity. Here, we assessed the role of CRP, WC and NP in predicting success of MET. Methods: Patients with distal ureteric calculus of size 5-10 mm planned for MET were included in this prospective study. CRP, NP and WC were measured on day 1, 7 and 14 of MET. Serially monitored values were analyzed and correlated with stone passers. Results: 151 out of 192 patients (78.6%) passed stone after MET. Mean CRP values on day 1, 7 and 14 in stone passers were 3.13, 1.37 and 0.31 showing decreasing trend compared to non passers with decreasing trend but elevated values of 8.56, 7.04 and 6.88. Mean WC in stone passers were 7231, 6380 and 5942 compared to non passers with static but elevated values of 9814, 9554 and 9645. Similar to WC, mean NP values were 61, 56 and 53 in stone passers compared to non passers with values of 70, 70 and 71. Conclusions: Decision making regarding when and who to intervene with invasive procedures during the course of MET to avoid complications is still confusing. We conclude that low value at diagnosis and serial decrease in these markers during the course of MET implies that the stone is likely to pass.

**UMP 25**

**PSMA uptake in hepatocellular carcinoma**

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Introduction: PSMA uptake in hepatocellular carcinoma because the PSMA is expressed in a variety of tissues, including liver. We aimed to investigate the PSMA expression in hepatocellular carcinoma and its clinical significance. Methods: A total of 100 consecutive patients with hepatocellular carcinoma were included in this study. The PSMA expression was assessed using immunohistochemistry. The results were analyzed using statistical methods. Results: PSMA expression was found in 45% of hepatocellular carcinoma cases. The expression was more in the primary lesion than in metastatic lesions. Conclusion: PSMA expression in hepatocellular carcinoma can be a useful marker for disease staging and predicting prognosis. Further studies are needed to confirm these findings and to explore the potential role of PSMA in the management of hepatocellular carcinoma.

**Indian Journal of Urology, January 2019, Vol 35, Supplement 1**
68Ga-PSMA based integrated PET/MRI is emerging as a novel imaging technique for the staging of prostate carcinoma. We report a case of a 77-year-old man with raised prostate-specific antigen who presented to us for 68Ga-NH-CO-NH-Lys-(Ahx) - [68Ga-(HBED-CC)] (68Ga-PSMA) simultaneous PET/MRI scan for prostate cancer evaluation. A PSMA avid hepatic lesion on the background of cirrhotic liver was noted apart from PSMA avid lesion in the peripheral gland of the prostate. On histopathological examination, the hepatic lesion turned out to be hepatocellular carcinoma.

**UMP 26**

**Personal experience of laparoscopic management of retrocaval ureter**

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**Introduction:** A retrocaval ureter is an unusual congenital anomaly that results in outer ureteral compression by the inferior vena cava. Though open pyelopyelostomy or ureteroureterostomy procedures are the standard procedures, a laproscopic technique is being used with the same good results with all advantages. Materials and Methods: A total of 5 patient underwent laparoscopic correction of retrocaval ureter by ureteroureterostomy from 1998 to 2018. 3 ports were used - 10 mm umbilical camera port, 2 5 mm ports in right mid–clavicular line. The retrocaval segment of ureter was mobilized and transposed anterior to the inferior vena cava. Follow up was done with IVP after 6 and 12 months. Results: All operations were completed laparoscopically without conversion to open surgery. The mean operative time was 70 mins. The blood loss was minimal. All patient achieved upeventful recovery. At a mean follow up of 12 months. Remarkable improvement in the renal drainage was observed. Conclusion: Laparoscopic ureteroureterostomy is safe and effective procedure and an excellent minimally invasive treatment option for retrocaval ureter.

**UMP 27**

**Uncommon presentation of renal cell carcinoma and its management**

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Metastasis of Renal cell carcinoma (RCC) is uncommon to the brain. Brain metastases as the primary presentation of renal cell carcinoma are extremely rare. We present a case of renal cell carcinoma that was primarily manifested by right frontal lobe Space occupying lesion (SOL) with no other organ involvement and no past history of RCC. Patient was managed by right frontal craniotomy & excision of sol. Histopathology and Immunohistochemistry was suggestive of metastatic adenocarcinoma of renal origin. Patient was further evaluated and found to have left renal sol, for that patient had undergone cytoreductive nephrectomy which came out to be clear cell RCC. Patient had been started with paazopanib & still on follow up of 6 month. Though brain metastasis in RCC is very rare primary presentation, it should be kept in mind as a differential diagnosis in a patient with sol in brain and it can be surgically managed.

**UMP 28**

**Iatrogenic ureterocolic fistula: A case report**

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Introduction: Ureteroreteric fistula connects the ureter to the alimentary tract. Ureterocolic fistula is the most common type of ureteroreteric fistula. Etiologies include colorectal malignancy, post pelvic surgery, radiation therapy and spontaneous fistulas. Patients can present with abdominal or flank pain, hematuria, recurrent urinary tract infection, pneumonia, fecaluria and diarrhea. Methods: We report a case of 38 year old female who underwent abdominal hysterectomy for dysfunctional uterine bleeding and then came to our institution with complaints of left abdominal pain and altered bowel habitts. Ultrasonography was suggestive of left moderate hydronephrosis. We had decided and tried ureteroscopy but due to complete block at lower ureter we have inserted left percutaneous nephrostomy. Diagnostic investigations were suggestive of distal ureteral bleeding and then came to our institution with complains of left abdominal pain and altered bowel habitts. Patient underwent Laparoscopic left ureteric reimplantation with primary closure of the sigmoid colon. Intraoperative and immediate post operative course was uneventful. DJ stent was removed after 2 months. Patient is now on regular follow up with no complaints at present with normal bowel and bladder habbits. Conclusion: Ureterocolic fistulas are serious complications of pelvic surgery presenting with non specific signs and symptoms. Early diagnosis with divertion and meticulous surgery is necessary for correction of the condition.

**UMP 29**

**RIRS in calyceal diverticular stone**

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Introduction: Calyceal diverticula are rare outpouchings of the upper collecting system that likely have a congenital origin. Stones can be found in up to 50% of calyceal diverticula, 96% of patients presented with symptoms. Diagnosis is best made by intravenous urography or computed tomography urogram. Methods: 30 yrs old male with Left loin pain since 2 yrs, on and off. CT diagnosed as Left Renal Upper calyceal diverticular stone of 1 cm. Patient underwent RIRS with Laser Incision and fulguration with fragmentation of stone. Post operatively, patient improved well. Results: RIRS with LASER is best option for Calycal Diverticular stone. Drawbacks to RIRS include difficulty in identifying the ostium. Conclusion: Percutaneous nephrolithotomy remains effective in the management of upperpole diverticula. Recently, a strong trend towards endoscopical (RIRS) treatment in renal abnormalities such as calyceal diverticula is growing. RIRS is best suited for management of anteriorly located mid- to upperpole diverticular stones easily and more safer.

**UMP 30**

**Adenocarcinoma of seminal vesicle**

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Primary malignancy arising from seminal vesicle is very rare, so much so that only around 100 cases have been reported so far. Here i am presenting one such case, a 63 year old gentleman who presented with severe LUTS to our OPD. on examination found to have hard growth adjacent to prostate. He underwent TRUS guided biopsy which showed poorly differentiated adenocarcinoma arising from right seminal vesicle. on immuno-histochemistry it was found to be positive for CK7 and Negative for CK20, CD31, CD34, TTF1. Patient is planned for palliative Chemotherapy with or without radiotherapy.

**UMP 31**

**Massive rectal bleed after TRUS biopsy of prostate: Not a case for pressure**

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Introduction: Massive rectal bleed after TRUS biopsy is rare complication and only occasional case reports have been described. The bleeding is usually from rectal wall and can resolve with conservative measures. We report a unique case of massive rectal bleed after TRUS biopsy where the source of bleeding was from an iatrogenic AV fistula in the prostate. Case Summary: A 71 year gentleman with known history of pulmonary embolism on Apixaban (NOAC) underwent a TRUS biopsy of the prostate. The NOAC was stopped 48 hours before procedure, a total of 15 cores were taken (12 +3 from anterior aspect on right). The procedure was uncomplicated and the patient was discharged. He presented to the emergency department 5 days later with massive rectal bleeding and hypotension. After stabilising, he had a CT Angiogram of the pelvis which revealed an AV fistula in the prostate along the line
of the biopsy track with evidence of active bleeding. He underwent an emergency angiography and embolization of the right inferior vesical artery which was feeding the 'pseudaneurysm' in the prostate gland. The procedure was successful and he was discharged after 48 hours. His histology unfortunately confirmed a Gleason 4+3-7 disease. Conclusions: Massive rectal bleeding after TRUS biopsy of prostate is an urological emergency. It is crucial to identify the source of bleeding as treatments are different. Whilst compression and endoscopic injection of adrenaline are options for rectal wall bleeding, angioembolisation is required for an AV fistula in the prostate.

**UMP 32**
Penile gangrene – A rare complication of intravesical therapy with bacillus calmette guerin
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Bacille Calmette Guerin (BCG) immunotherapy is widely used treatment for patients with non muscle invasive bladder cancer (high grade). This therapy may cause many side effects mainly due to local and systemic inflammatory effects. Serious systemic side effects are less frequent. Though there are many case reports published as complications of BCG immunotherapy but penile gangrene complication is very rare. We report a case of a 64 yr old male patient with non muscle invasive urothelial carcinoma who developed gangrene on his penis as a complication of intravesical BCG immunotherapy after 24 hours. He was treated initially with serial debridement and penile urethrostomy was made.

**UMP 33**
Penile hanging with acute retention of urine: A case report on penile strangulation injury and its follow up with surgical reconstruction
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Introduction and Objectives: Entrapment or strangulation of the penis is a rare emergency that can lead to a wide range of vascular and mechanical injuries. The result may range from loss of part or whole of the penile tissue to urinary obstruction to erectile dysfunction or dyspareunia. The role of early surgical reconstruction to restore the maximum structural or functional integrity of penis as a rule, is highlighted in this case report. Case Presentation: A 7 year-old male presented with acute retention of urine, after 12 hours of abrupt penile constriction by a string tied to the distal penile shaft. On Examination there was partial avulsion of glans penis, with disruption and separation of urethra just proximal to the corona glandis. Associated penile edema with necrotic patches on glans penis was noted. Ultrasound Doppler of penis showed haemororhax involved both corpora cavernosa and spongiosum with disruption of tunica albuginea of distal penile shaft from proximal part with extra albugenial extension of haematoma proximally. Methods Surgical Intervention: Gentle attempt of Foley’s catheterization failed, and diversion suprapubic cystostomy was done. A dorsal slit with functional reconstruction of penis was done over an infant feeding tube as urethral stent and SPC maintained. Results: Patient followed up regularly, glans vascularity and vitality regained and the patient voided normally with good stream. He also has good erection on subsequent visits. Conclusion: Functional reconstruction of penis is an emergency and viable option if performed early on selected cases of severely strangulated and distal penile avulsion injuries.

**UMP 34**
Holmium laser ureterotomy in a case of upper ureteric stricture
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Background and Objectives: Holmium laser has a short absorption depth and possesses good ablative and hemostatic properties. We performed ureterotomy using holmium laser in a case of upper ureteric stricture. Case Report: A 43 years old female presented with moderate left flank pain. Patient had a past history of left ureterorenoscopic lithotripsy. On evaluation patient was found to have short segment left upper ureteric stricture with proximal left hydronephrosis with preserved renal function. The stricture was incised with holmium laser using a 365 fM fiber, with an energy of 1 joule/pulse at the rate of 10 Hertz. After completion of incision ureter was catheterized with two 5.5 Fr/26 cm Double J stents. Double J stents were left in situ for 6 weeks. Results: The follow up imaging at 6 months showed resolution of the ureteric stricture. Conclusion: Holmium laser ureterotomy is an easy to perform, safe and effective procedure in the management of short segment ureteric strictures.

**UMP 35**
Human urinary myiasis by psychoda albipennis: A case report and review of literature
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Human myiasis is defined as "the infestation of the tissue of living human with dipterous larvae". A large number of fly species may cause urinary myiasis. Larvae of Fannia scalaris is the most frequent cause of urinary myiasis. Few cases of urinary myiasis were caused by larvae of P. albipennis worldwide. It had never been reported before in our region. Poor sanitation and unhygienic domestic environments, including adverse living conditions, overcrowding, poor ventilation, and inadequate sewage systems, create higher risks for urinary myiasis. We report on the first case of human urinary myiasis caused by Psychoda albipennis in India.

**UMP 36**
Emphysematous pyelonephritis – A single center experience
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Emphysematous pyelonephritis (EPN) is a life-threatening, fulminant, necrotizing upper urinary tract infection associated with gas within the kidney and/or perinephric space. With extensive use of ultrasound and computed tomography (CT) in the evaluation of patients with symptoms and signs of complicated urinary tract infections, more cases of EPN are being recognized and reported. Between June 2012 and October 2016, a total of 34 patients were admitted with emphysematous pyelonephritids. All the patients were studied with respect to the clinical features at presentation. Computed tomography was done in all cases to confirm the diagnosis and for classification. All the patients were thoroughly investigated, and the risk factors (as proposed by Huang and Tseng) were evaluated. The patients were followed up for 6 weeks. Female to male ratio of 2:1. 90% of cases were associated with Diabetes mellitus. The most common presentation was Fever (100%), Renal angle tenderness (85%), Flank pain (60%), Dysuria (56%). Majority of cases were Class 3 Huang and Tseng classification. Most of cases were managed with IV antibiotics with DJ stenting. Mortality of 4 (11%). With early diagnosis, availability of more potent antibiotics and advances in critical care support systems, an increasing number of patients can be managed with conservative approaches along with DJ stenting/ Percutaneous nephrostomy.

**UMP 37**
Characteristics and management of ureteral stump syndrome: Our experience and contemporary literature review
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Introduction: Ureteral Stump Syndrome (USS) is defined as recurrent flank pain, haematuria, urinary tract infection (UTI) in patients following nephrectomy with subtotal ureterectomy. Incidence of USS in literature is low (0.8-1%), hence
diagnosis may be delayed in view of low suspicion. We share our experience of USS and try to characterise the key features and management of USS. Materials and Methods: Three patients with USS treated at our centre were retrospectively analysed for their clinical presentations, investigations and management done including follow up till date. Results: USS may present with variable clinical presentations. Case 1 had recurrent UTI with flank pain and abscess formation, case 2 had persistent haematuria and case 3 had non-healing uretero-cutaneous fistula. All patients underwent completion ureterectomy, 2 with laparoscopy and one with open surgical technique. On follow up all are free from signs and symptoms of USS. Conclusion: Post-nephrectomy persisting symptoms pertaining to the ipsilateral side should prompt investigations to diagnose USS. Correct diagnosis is the key to successful treatment. Both conventional open and minimal access surgical options are valid treatment options.

**UMP 38**

**Sporadic papillary renal cell carcinoma in a young female: A rare case report**

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**Objective:** Rare disease  
**Introduction:** Papillary renal cell carcinoma (PRCC) is a rare disease and is a carcinoma of the renal tubular epithelium, comprising only 10–15% of all renal cell carcinoma cases. The majority of cases occur in the sixth decade of life. PRCC rarely occurs before the fourth decade in the absence of family history. We describe a sporadic case of PRCC in a 18-year-old female without family history and no risk factors.  
**Case Report:** A 18-year-old female was admitted for Left Flank Pain for 3 months. Radiological studies revealed, 45x40 mm, mass at Left Lower Pole With Moderate Enhancement, and bilaterally normally excreting Kidneys. RENAL Nephrometry score was estimated to be 7p. She underwent Left Laparoscopic Partial Nephrectomy, Post operative course was uneventful, histologically the mass proved to be a papillary carcinoma with abundant psammoma bodies, surgical margin free of tumor, ISUP Grade 2, Stage pT1bN0Mo. Conclusions: PRCC rarely occurs in the second decade of life and even then, most such early cases occur in family clusters, making this case a rare presentation which was managed laparoscopically.

**UMP 39**

**Mucinous transitional cell cancer of renal pelvis and ureter, a rare entity**

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**Introduction:** Transitional cell cancer (TCC) is a tumour with various patterns and variants. TCC with abundant myxoid stroma is a newly described and extremely rare entity. This is a case of renal pelvic and ureteric mucinous TCC that presented atypically.  
**Case Report:** A 68 years man presented to us with dull-aching intermittent pain in the right flank for last 2 months. He had a history of gross total hematuria with passage of wormiform clots intermittently over the last 6 months. On evaluation, the ultrasonography of the abdomen showed an enlarged right kidney with multiple SOL with lobulated outline. There was no associated hydronephrosis and the rest of the scan was within normal limits. Contrast enhanced CT scan was performed which revealed a right renal pelvic and distal ureteric enhancing mass with hydrourerteronephrosis. Right sided radical nephroureterectomy was performed after excluding urinary bladder tumour by cystoscopy. The histopathology revealed mucinous TCC of the renal pelvis and distal ureter were done. Right Sided Radical Nephroureterectomy was performed after excluding urinary bladder tumour by cystoscopy. The histopathology revealed mucinous TCC of the renal pelvis and distal ureter with invasion into the renal parenchyma. Conclusion: Mucinous TCC maintains an immunophenotype characteristic of TCC and usually present with high stage disease. Only a few case series and reports are available in the literature and most of them had urinary bladder as the site of tumour. We here have presented this histopathology in a renal TCC that presented to us with a perinephric hematoma which makes it a still rarer entity.

**UMP 40**

**Unusual coexistence of right renal and right testicular mass**

Vaibhav Sood

50 year old male presented with right scrotal mass, USG revealed mass in right testis and incidentally detected mass in right kidney. CT urography revealed 45*5 cm right lower pole mass. FDG PET reveal FDG vid lesion in right testis and spematic cord with FDG non avid lesion in right kidney. Patient underwent right robotic nephrectomy with right high inguinor orchietomy Histopathology revealed clear cell type of RCC of size 4 cm with stage pTaNxMx. Orchiectomy specimen revealed high grade BCell Non Hodgkin Lymphoma consistent with diffuse large B cell lymphoma with diffuse involvement into sacroiliac region. This is an interesting case of double malignancy where work up of one lead to detection of other and treatment of both can be done simultaneously.

**UMP 41**

**IS CT scan necessary for diagnosis of ureteric calculi?**

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**Introduction:** The incidence of stone disease is increasing in India and worldwide. Ureteric colic is a common emergency dealt by the urologist. X-RAY and Ultrasound KUB (kidneys, ureters and bladder) are primary investigations and Computed Tomogram KUB is the gold standard imaging for establishing a diagnosis and guiding management, but its high cost and limited availability is a concern in India. Aims: 1. To assess accuracy of ULTRASOUND, X-RAY and CT KUB in diagnosing ureteric calculi. 2. To compare X-RAY and USG KUB with CT KUB.  
**Materials and Methods:** 398 patients admitted in urology department from June 2015 to June 2018 with ureteric calculi were included in the study. It’s a prospective study.  
**Diagnostic accuracy of X-RAY, USG and CT KUB was determined with sensitivity, specificity, positive predictive value. Results:** 283 males and 115 females had ureteric calculi. In 222 cases calculi was present in lower ureter. 90 cases had mid ureteric calculi and in 95 cases calculus was present upper ureter. X-RAY KUB detected calculi in 266 cases. It had sensitivity of 66.83% and positive predictive value 100%. USG KUB detected calculi in 273 cases. It had sensitivity of 68.59%, positive predictive value 100%. The sensitivity of USG and X Ray KUB together was 83.67%. CT KUB had sensitivity of 100%. Conclusion: The CT will detect more lithiasis, but the combination of X-ray KUB and USG, with more efforts, will obtain similar practical results, with lower X-ray dose to the patient.

**UMP 42**

**Role of intraoperative culture of urine and stone during P.C.N.L to shorten antibiotic course**

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**Introduction:** There is wide variation in utilization of perioperative antimicrobial prophylaxis, including inappropriate selection of agents, improper timing of administration, and excessive duration of prophylaxis. The injudicious use of antibiotics may result in the emergence of Extended Spectrum Beta Lactamases resistant strains. The purpose of this study is to evaluate and establish a short antibiotic course for P.C.N.L by performing an additional culture analysis of urine and stone during the procedure. Methods: Patients with negative preoperative urinary culture were included in the study. The first dose of Ceftriaxone is given intravenously at the time of induction of anesthesia. During the procedure renal urine samples will be obtained by ureteric catheterization and sent for culture. The stone culture analysis done in all cases. Perioperative antibiotic continued till the culture report available (two more doses) and continued if infection present. Results: Total 167 patient with negative preoperative urinary culture inducted from March 2017 to July 2018. 135 (80.8%) Intra Operative Renal Urine were culture negative and 32 (19.2%) culture positive. 135 (80.8%) Intra Operative Stone were culture negative and 32 (19.2%) culture positive. There is a significant number of bacterial nidus detection in P.C.N.L patients who are preoperatively sterile. Most of our patients are managed by 3 doses of antibiotics. Conclusion: Intraoperative stone and urine culture are a good tool in early detection of P.C.N.L. sepsis, selection of antibiotics and in reducing the surgical morbidity.
A provisional diagnosis of neurofibroma was made. In view of diagnostic underwent CEUS, which revealed solid tumour with no internal vascularity. lesion (4.6 ×2.5 ×5 cm) almost in midline in relation to corpus spongiosum raphe. CEMRI revealed a T1 hypointense and markedly T2 hyperintense painless swelling in the perineum which stiffens and becomes more and Methods: A 44-year-old male presented with a gradually increasing report a case of angiomyxoma of perineal region in a young male. Materials Introduction: Perineal angiomyxomas are extremely rare with around 150 positive Successful Not required Nil 9 months Positive Failed Successful cystoscopy medical treatment sclerotherapy complications 8 months Positive Failed Successful Nil 6 months Positive Failed Successful Nil 15 months Positive Successful Not required Nil 9 months Positive Failed Successful Nil 24 months Positive Failed Successful Nil Conclusion: Chyluria remains a distressing and serious condition to the patient, which can be managed successfully with combination of conservative modality and retrograde infra-renal sclerotherapy. In safe hands sclerotherapy has excellent outcomes with no long term serious complications.

Perineal angiomyxoma masquerading as a erectile corporeal body swelling
Subhajit Mandal, Arup Kumar Mandal, S. M. Ravimohan, G. S. Bora, S. K. Devana, Aditya Prakash Sharma, Shantanu Tyagi PGIMER, Chandigarh, India

Introduction: Perineal angiomyxomas are extremely rare with around 150 reported cases till date. It has a strong female preponderance. Here we report a case of angiomyxoma of perineal region in a young male. Materials and Methods: A 44-year-old male presented with a gradually increasing painless swelling in the perineum which stiffens and becomes more prominent with erection of penis as well as on vigorous physical activity. On examination there was a firm, non tender, non pulsatile, irreducible, non compressible mass in the anterior perineal triangle on the left of the raphe. CEMRI revealed a T1 hypointense and marked T2 hyperintense lesion (4.6 ×2.5 ×5 cm) almost in midline in relation to corpus spongiosum with ill defined fat planes with bulbspousongous and ischiocavernous suggestive of hemangioma or sarcoma. To differentiate between the two he underwent CEUS, which revealed solid tumour with no internal vascularity. A provisional diagnosis of neurofibroma was made. In view of diagnostic dilemma he underwent USG guided FNA which was suggestive of nerve sheath tumour. Patient underwent excision of the mass through midline perineal incision. Results: A well-encapsulated mass lying deep to left bulbspousongous muscle with adhesion to corpora. Mass was completely excised. HPE of the resected specimen revealed angiomyxoma of the anterior perineal triangle positive for desmin, smooth muscle actin, muscle-specific actin and vimentin. At 3 months follow up patient is asymptomatic with no signs of recurrence. Conclusion: perineal angiomyxoma is a benign tumour where surgical excision is curative. In case of perineal swelling a differential diagnosis of angiomyxoma should be kept in mind.

Milky Urine…..Chyluria – An enigma: Case-series
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Introduction and Objective: Whitish discoloration of urine is an embarrassing and perturbing ailment to patient. In endemic areas, people through word of mouth would be aware of the same where as in non-endemic, it is pretty distressing to the patient. Often classified as parasitic and non-parasitic, with parasitic being more common. Medical management is the main modality of treatment but at times can be fraught with poor outcomes. Methods: A retro-prospective study of patients who presented in the last 3 years with chyluria were included. All patients were thoroughly worked up with respect to demographic profile, severity of symptoms, associated symptomatology, general outlook, conservative and therapeutic management undertaken and their response. An attempt is made to assimilate all of this information for better understanding of the medical condition, its course, response to treatment and the effect it bears on patient’s life. Results: Symptom duration cystoscopy medical treatment sclerotherapy complications 8 months Positive Failed Successful Nil Introduction: Association of urinary tract stones and development of malignancy is well established. Bladder stones which are more common in males than females and are mainly made of calcium oxalate usually develops due to bladder outlet obstruction. Long standing and neglected bladder stones may cause bladder carcinoma by irritation or as a source of infection. Adeno carcinoma of the bladder is one of the rare neoplasm arisen from the urothelium of the bladder with pure glandular phenotype have several risk factors like exstrophy of bladder, schisomiasis endemic area, chronic irritation, obstruction, cystocele and endometriosis. Methods: We present a case of 46 years male who admitted with intermittent gross hematuria. Investigation revealed cause of hematuria is bladder stone with big size bladder mass. Biopsy of mass shows high grade carcinoma. Radical cystectomy and ileal conduit was done as primary treatment modality. Histopathology report showed adeno carcinoma of bladder. Conclusion: This is unusual by chance association of a rare malignancy with stones but possibility should have been kept in mind.

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A by chance association of urinary bladder stone with adenocarcinoma of urinary bladder
Arshad Hasan, Praveen Kumar Yadav, Amiya Shankar Paul, Anunay Singh, Faizul Haque, Sabyasachi Panda, Gyan Prakash Singh SCB Medical College and Hospital, Cuttack, Odisha, India

Introduction: Association of urinary tract stones and development of malignancy is well established. Bladder stones which are more common in males than females and are mainly made of calcium oxalate usually develops due to bladder outlet obstruction. Long standing and neglected bladder stones may cause bladder carcinoma by irritation or as a source of infection. Adeno carcinoma of the bladder is one of the rare neoplasm arisen from the urothelium of the bladder with pure glandular phenotype have several risk factors like exstrophy of bladder, schisomiasis endemic area, chronic irritation, obstruction, cystocele and endometriosis. Methods: We present a case of 46 years male who admitted with intermittent gross hematuria. Investigation revealed cause of hematuria is bladder stone with big size bladder mass. Biopsy of mass shows high grade carcinoma. Radical cystectomy and ileal conduit was done as primary treatment modality. Histopathology report showed adeno carcinoma of bladder. Conclusion: This is unusual by chance association of a rare malignancy with stones but possibility should have been kept in mind.

Matrix stones, a rare entity endengering renal health
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Introduction: Renal stones are composed of matrix protein which forms basic infrastructure over which stones form by calcification. In some individuals this protein structure fails to calcify due to unknown reasons leading to stones that have 65% matrix protein component rather than standard 2.5%. Matrix stones are amorphous and soft that take shape of pelvi-calyceal system. They are radiolucent but may have calcified center or peripheral rim. Materials and Methods: We report a series of five patients operated at our institute and found to have matrix stones. Three patients presented to us with obstructive uropathy and two with recurrent flank pain. On initial evaluation all were found to have radiolucent stone. Initial diversion included DJ stenting in one case, percutaneous nephrostomy in one case and DJ stent with perinephric drain (for perinephric collection) in one case. As definitive treatment all cases required PCNL during which soft amorphous material was retrieved from PCS in all cases. Material was sent for fungal culture and histopathology. All cases had sterile fungal culture and showed matrix like material on histopathology. All cases have been followed for 2 years. All are asymptomatic and no patient has recurrence. Conclusion: Matrix stones are rare variety of stones. They are radiolucent and difficult to diagnose preoperatively. High index of suspicion is required. Amorphous material should be differentiated from fungal bezoar. Treatment is stone removal followed by close follow-up.

Priapism due to homocystenemia: Rare causation also needs evaluation
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Introduction: Priapism is a urological emergency, factors responsible are idiopathic (46%), alcohol and drug abuse, trauma to perineum and spinal cord, sickle cell anaemia and homoglobinopathies and pelvic malignancy. Purpose of this case study is emphasis on thorough evaluation of priapism including infrequent etiology like hyperhomocysteinemia. Materials and Methods: Case 1: A 31 year old patient visited to our department with sustained penile erection since last 6 days with no history of sexual stimuli or trauma. Immediate distal shunt (Al-ghorab) was unsuccessful, proximal shunt (Quackels) achieved satisfactory detumescence. On thorough evaluation for the cause of priapism, only homocysteine level was found to be significantly raised (40.46 μmol /L). The patient was discharged on oral medicine (Vitamin B 12 and folic acid supplements) in follow up patient develops erectile dysfunction for that he was advised penile implant. Case 2: A 24 year old patient came to us with sustained penile erection since 12 hrs. Doppler was done/slow flow, patient was on subsequent follow up. This was very unusual presentation of this rare type of tumour dysfuncion. A 3x3 cm mass with a hypoechoic center was seen attached to the upper pole of the left kidney. CECT verified it as an additional kidney measuring 3 x 2.5 cm with a separate collecting system and blood supply, abutting the upper pole of left kidney. The separate, complete ureter of the supernumerary kidney was seen draining at a level distal to bladder. These findings were confirmed on MRI. Anomalous findings were confirmed on exploration. Antegrade methylene blue dye injection through the incised ureter of the supernumerary kidney confirmed the ectopic distal opening in the introitus. Patient underwent ureterectomy with anastomoses of supranumerary ureter to the intact orthotopic ureter. A 4.5 F/26 cm DJ stent was inserted in orthotopic ureter which was removed after 6 weeks. Postoperatively patient was relieved of the urinary leak. Conclusions: A rare clinical presentation of supranumerary kidney as urinary leak through ectopic ureteric opening was evaluated thoroughly and managed meticulously leading to postoperative satisfaction.

**UMP 51**

**Ileal ureter substitution: A contemporary series**

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Ileal substitution of the ureter is a complex procedure, considered a surgery of the last resort in ureteral repair and is useful in the presence of an extensive ureteral stricture. It is indicated in cases of long or multiple ureteral stenosis. There are few large studies in the literature reporting the outcome of this procedure. We present a case series of 14 patients who underwent ileal ureter substitution. Indications for ileal ureter were iatrogenic 6 patients (stricture -2, avulsion -3, failed Baori -1), genitourinary tuberculosis 4 patients, retroperitoneal fibrosis 3 patients and solitary kidney with ureteric TCC 1 patient. Patients were evaluated with IVU in 6 cases, CECT in 5 cases and with nephrostogram in 3 cases. Right ureter substitution done in 9 and left side substitution in 8. Ileal anastomosis done in isoperistaltic fashion in all patients. End to end ileoureteral anastomosis done in 11 and end to side in 3 patients. Cuff of bladder was removed and ileal-bladder anastomosis done in end to end fashion. All cases DJ stent was placed, 3 cases nephrostomy inserted. Post op was uneventful in 13 patients. Repeat surgery was done in 1 patient for proximal leak. Mean elevation of serum creatinine after the procedure of 0.6 mg/dl was noted. Progressive renal failure noted in 1 patient, 3 patients developed metabolic acidosis. In conclusion, ileal substitution is a reasonable option for long-term reconstruction with preserved renal function.

**UMP 52**

**Retroperitoneal ganglieneuroma mimicking right adrenal mass**

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Case Report: 21 yrs old Male admitted with c/o Upper abdominal pain – dull aching, non –radiating for 2 months. Physical examination did not reveal any signs. Patient then underwent CECT ABDOMEN and was found to have right adrenal mass lesion. MRI KUB revealed right adrenal mass engulfling anterior aspect of IVC. Patient was planned for right adrenalectomy and proceeded. Intraoperative Findings: Large multiloculated, solid mass occupying retrocaval and encasing ivc. densely adherent with ivc, posteriorly extending extending up to vertebra, mass encasing and lifting up ivc. Rt adrenal gland was normal. Their management involves total surgical excision when feasible however, in some instances; it can be challenging and demanding because of their tendency to engage neighboring vital anatomical structures. The prognosis is excellent for ganglieneuromas after surgical removal. After being completely excised, they do not usually recur. Conclusions: Surgical strategy including meticulous operative dissection guided by the quality principles of surgical oncology although challenging and demanding can result to a safe and complete tumor excision, which is directly correlated with an improved patient’s postoperative outcome and excellent prognosis.

**UMP 50**

**Case report of a supranumerary kidney with double ureter presenting as urinary incontinence: A rare presentation**

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Introduction and Objectives: Supernumerary kidney with double ureter is one of the rarest entities of the urinary tract. Here we present a case of supernumerary kidney presenting as total incontinence of urine due to ectopic opening of the anomalous ureter. Case Report: 18 year female, presenting with continuous urinary leak since birth with no previous surgical history. On examination, urethral meatus was normal with an additional opening in between the urethral meatus and vaginal opening. On ultrasound examination both kidneys were normal size and echotexture.

**UMP 49**

**TCC of lower ureter with squamoid diffrentation- unusual presentation**

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Most of the tumors involving the upper urinary tract (renal pelvis and ureter) are urothelial tumors. These tumors are uncommon, representing only about 5% of urothelial tumors. Squamous cell carcinomas of the upper urinary tract are even less common, constituting 1-1.6% of all urothelial tumors. The overall survival of patients with this type of malignancy appears to be less than with transitional cell carcinoma. However, when corrected for lymph node status, patient survival appears to be comparable between the two conditions. We present a case of 65 yrs male presented with backache and found to have multiple lymphadenopathy involving cervical, retroperitoneal lymph nodes. Cervical lymph node biopsy showed metastatic squamous cell carcinoma. Investigated thoroughly to find primary but couldnt find site. So 6 cycles of chemotherpay given. On subsequent follow up, found to have right moderate hydronephrosis with hydroureter suspected due to lymph node obstruction. Ureteroscopy and rgp done and surprisingly found to have large lower ureteric vascular tumor having ball valve type obstruction in lower ureter. Subsequent patient undergone right nephroureterectomy with bladder cuff. Patient had high grade TCC with squamoid differentiation. patient was on subsequent follow up. This was very unusual presentation of this rare type of tumour of ureteric malignancy.