**Introduction:** The COVID-19 pandemic has brought unprecedented challenges to providing urologic care. In this paper, we report our experience with antegrade ureteral stent with a non-absorbable suture post PCNL in avoiding patient visits and also its outcomes.

**Materials and Methods:** This was a prospective single centre study done during lockdown period, between May 2021 - June 2021 at KMC, Manipal. The inclusion criteria were single tract, pre-operative normal renal function, no intraoperative complication and complete stone clearance.

**Results:** A total of 30 patients were included in this study after obtaining informed consent. No patients had any urinary leak from the site of percutaneous access, either with the stent in vivo or after removal. 2 cases had post-operative infection, which was defined by one of the following signs - Pyrexia > 38°C (> 100.4°F), leucocytosis >11,000/mm³ or presence of > 5 pus cells in urine/high power field. The mean haemoglobin drop was 0.35 g/dL and average duration of hospital stay was 22.6 hours. The thread protruding from the flank did not cause any discomfort or pain to any of the patients. All stents were removed successfully by patients themselves after 7-8 days without any significant pain, no incidence of breakage or bleeding from the percutaneous tract or haematuria.

**Conclusion:** The present study demonstrates that tubeless PCNL with antegrade tethered DJ stent has the advantages of avoiding the need for cystoscopy for stent removal. This avoids frequent hospital visits of patients and relatives, thereby decreasing the risk of covid transmission.

**UBPAP 02**

**Trifecta and pentafacta outcomes in laparoscopic and robotic nephron sparing surgery for highly complex renal tumors: A propensity score matched cohort analysis**

Dr Harshit Garg, Dr Bhabatosh Das, Dr Amit Bansal, Dr Ruchir Maheshwari, Dr Samit Chaturvedi, Dr Ayush Singh, Dr Anant Kumar
Max Hospital, New Delhi

**Introduction and objective:** To compare the trifecta and pentafacta outcomes of laparoscopic partial nephrectomy (LPN) and Robotic partial nephrectomy (RPN) for highly complex renal tumors (RENAI nephrometry score ≥10) using matched cohort analysis.

**Methods:** A retrospective analysis of patients undergoing LPN or RPN by a single surgeon between 2014 till 2019 was done. 172 patients were screened. Of them, 99 patients had RENAL score ≥10 and 33 of them underwent LPN. The patients opted for laparoscopic approach due to financial constraints. Using 1:2 propensity score match analysis, 30 patients who underwent LPN (Group A) were matched with 60 patients who underwent RPN (Group B). The two groups were compared for standard trifecta and pentafacta outcomes.

**Results:** The mean age (SD) was 54.2 (11.2) years and 44 (48.9%) were females. The median (IQR) RENAL score was 10(10-11). On comparison, the mean WIT in Group A was significantly longer than Group B (27.2min vs 22.1min, p=0.012). The positive surgical margin rate was 6.6% in Group A as compared to 0% in Group B. The overall complication rate was 20% in Group A as compared to 16.7% in Group B (p=0.69). The trifecta outcomes could be achieved in 16 patients (53.3%) in Group A compared to 45 patients (75%) in Group B (p=0.038). However, 13 patients (43.3%) in Group A and 36 patients (60%) in Group B achieved pentafacta outcomes (p=0.13).

**Conclusions:** RPN offers superior trifecta outcomes but similar preservation of renal function as compared to LPN for highly complex renal tumors.

**UBPAP 03**

**Neurological safety and efficacy of Darifenacin and Mirabegron for the treatment of overactive bladder in patients with history of cerebrovascular accident: A prospective study**

Dr Iyer S, Dr Kumar A, Dr Patel S, Dr Yadav S, Dr Kumar N, Dr Vasudeva P
VMMC & Safdarjung Hospital, New Delhi

**Introduction:** Antimuscarinics are commonly prescribed in elderly, in patients with neurological diseases. Darifenacin being M3 selective and mirabegron, without antimuscarinic adverse effects, are considered safe in patients with neurological diseases such as cerebrovascular accidents (CVA) and impaired cognitive function, but the evidence is mostly lacking. We evaluated the neurologic safety and clinical efficacy of darifenacin and mirabegron in patients with neurogenic over-active bladder (OAB) post CVA.

**Methods:** This prospective randomized study, approved by institute’s ethics committee was carried out at a tertiary care center from December 2018 to June 2020. Treatment naïve adult patients with a past history of CVA,
stable neurological status for at least past 3 months with symptoms of OAB for 3 or more months were included. Eligible patients received either Darifenacin or Mirabegron for a period of 3 months and various parameters on the 3-day bladder diary, the Montreal Cognitive Assessment—Basic score (MoCA-B) and the adverse events at 3 months post treatment were compared to that at the baseline.

Results: A total of 60 patients were included, 30 in each arm. After 3 months of treatment, the majority of the bladder diary parameter improved and there was no deterioration in the cognitive function as noted on the MoCA-B score in either of the arms. On intergroup comparison, the mean change in bladder diary parameters and the MoCA-B scores was similar to the two groups.

Conclusion: Darifenacin and Mirabegron do not adversely affect the cognitive function in patients with OAB post CVA and are safe, effective treatment options in post CVA OAB patients.

UBPAP 04
Peri-operative, Oncological and survival outcomes of Robotic radical cystectomy with urinary diversion in females
Dr Varun Agarwai, Dr TB Yuvaraja, Dr Santosh Waigankar, Dr Preetam Dev, Dr Abhinav Pednekar
Kokilaben Dhirubhai Ambani Hospital & Medical Research Institute, Mumbai

Introduction: Robot assisted radical cystectomy (RARC) is a preferred approach for surgical management of bladder cancer. Currently, majority of the literature on RARC involves men in view of higher incidence of bladder cancer in them. We hereby document peri-operative variables, oncological and survival outcomes in 41 women who underwent RARC, by single surgeon at a tertiary health care centre.

Materials & Methods: Out of 225 RARC and urinary diversion procedures performed from 2012 to 2020, a retrospective analysis of 41 women was performed. Baseline demographic and peri-operative details, oncological data and survival were recorded and analyzed. Kaplan-Meir analysis was done for survival outcomes and prognostic factors were assessed by Log Rank test.

Results: Thirty eight patients underwent intracorporeal urinary diversion while three underwent extracorporeal diversion. One patient underwent organ preserving cystectomy. Clavien Dindo 30-day postoperative complications were Grade I in 8 (19.5%), Grade II in 4 (9.8%) and grade IIIa in 3 (7.3%) patients without any mortality. During median follow up of 34 months (Range 6-87 months), 7 patients died of disease recurrences. Five-Year survival was 74% (95% CI 59-82) and 35% (95% CI, 10-91) in transitional cell carcinoma (TCC) and non-TCC group respectively with p value of 0.04. There was no mortality in Stage 0 and 1. Five year survival was 78% in stage 2 and 41% in stage 3 and 4.

Conclusion: Our study highlights safety, feasibility and acceptable clinical, peri-operative and oncological outcomes of robotic radical cystectomy in females which should be incorporated in the mainstream approach.

UBPAP 05
To evaluate the efficacy of narrow band imaging in the detection of additional malignant lesions after endoscopic therapy of transitional cell carcinoma of urinary bladder - A prospective, interventional study
Dr Misra A, Dr Nayak P, Dr Mandal S, Dr Das MK, Dr Kumaraswamy S, Dr Pandey A,
AIIMS, Bhubaneswar

Introduction and Objectives: Treatment of Non-Muscle Invasive Bladder Cancer (NMIBC) mainly depends on a complete Trans-Urethral Resection of Bladder Tumor (TURBT) under a white light source. Although Narrow Band Imaging (NBI) is known to improve the visualization of tumor on the mucosal surface, there is a scarcity of data regarding its exact role in the management of NMIBC. Our study aimed to assess the efficacy of detection of additional malignant lesions by NBI after white light TURBT and to catalogue visual characteristics that predict malignancy. We also explored the possible effect NBI aided resection has on recurrence.

Methods: A single-center, single-arm prospective interventional study involving sixty-five cases of NMIBC treated with endoscopic therapy (TURBT) was performed. The study was conducted in the Department of Urology from July 2019 to January 2021.

Results: Additional lesions were detected in 15 patients (23%) by NBI, of which four (6%) were of malignant histology. As per the visual cataloguing of the lesions, we postulate that carcinoma in situ (CIS) may appear as clustered dark spots with neovascularisation changes, as seen in three patients. In one patient, low-grade malignancy was detected. Among 31 follow-up cases, six had a recurrence.

Conclusions: Although NBI detects additional lesions, efficacy may be lesser than what has been published previously. We present a visual catalogue of malignant lesions detected under NBI, which as per our knowledge, is not present in literature. There may be a role of NBI in the detection of high-grade lesions.

UBPAP 06
Quality of life, efficacy and safety of sequential intravesical Gemcitabine + Docetaxel versus BCG for non-muscle invasive urinary bladder cancer - A pilot study
Dr Pareek Tarun, Dr Santosh Kumar, Dr Kalpesh Parmar, Dr Aditya P Sharma
PGIMER, Chandigarh
Purpose: BCG is considered the most effective agent for NMIBC. However due to BCG related toxicity, multiple studies have suggested role of newer chemotherapeutic drugs. The aim of our study was to evaluate intravesical Gem/Doce (Gemcitabine + Docetaxel) vs BCG with respect to quality of Life, safety and efficacy in NMIBC.

Methods: A total of 60 patients of NMIBC were evaluated between July 2019 to Dec 2020 in prospective manner. The study population was alternatively assigned to two groups (BCG vs Ge/Doce) of 30 patients each. Both the groups received 6 weekly doses of induction therapy followed by 6 monthly doses of maintenance therapy at interim follow up. QOL scores, safety and efficacy were assessed at start of intravesical therapy, end of induction and 6 months of maintenance therapy (D0, D1 and D2). Cystoscopy examination was performed at end of induction therapy and 3 monthly thereafter.

Result: The preliminary results at the end of 6 months following maintenance therapy showed that the demographic profile, histological stage and grade were comparable between two groups. The QOL scores using QLO-30 and QLO-BLS-24 showed statistically significant difference with Gem/Doce arm showing better outcomes. There were no progressions, while one recurrence each was seen in both groups. Patient related side effects measured by CTCAE showed BCG group had higher toxicity profile as compared to Gem/Doce group.

Conclusion: Gem/Doce combination intravesical therapy is a promising alternative to BCG for treatment of NMIBC, showing better QOL measures and lesser side effect.

UBPAP 07

Use of 5-Aminolevulinic Acid and novel TP4303 molecule for the diagnosis of bladder cancer in voided urine - A preliminary report, with special focus on comparison with conventional non-invasive urinary biomarkers

Dr Shoubhik Chandra, Dr Nerli R B, Dr Ghangane Shridhar, Dr Chandra Shreya

Jawaharlal Nehru Medical College, KLE Academy of Higher Education & Research, Belagavi

Introduction: Voided urine sample has been used to detect malignant cells in prostate cancer. Based on similar principle, our study aims to validate the hypothesis of detection of malignant urothelial cells in voided urine by using 5-Aminolevulinic acid (ALA) and a novel peptide TP4303 by targeting the VPAC [Combined Vasoactive-Intestinal-peptide (VIP) and pituitaryadenylate-cyclase-activating peptide (PACAP)] receptors. We also compared it with conventional cytology, BTA-TRAK and NMP-22 for the diagnosis of bladder cancer (BC). Materials and Methods: Patients ≥ 18 years of age presenting with LUTS (lower urinary-tract symptoms) and image (Ultrasonography/Computed tomography) confirmed bladder mass formed the study group. Voided urine sample was collected from all patients and sent for evaluation by fluorescent cytology, TP4303, conventional cytology, NMP-22 and BTA-TRAK and the results were correlated with histopathological analysis.

Results: Of 218 patients, 114 were cases & 104 were controls (mean age: 58.3±9.4 vs 50.4±2.3, p=0.04), higher TLC (10.4±3.5 vs 8.6±2.6, p=0.000002), higher NLR (4.07±2.8 vs 13.4±1.8, p=0.04), higher LMR (2.3±53.8 vs 115.4±68.9, p=0.005), lower LMR (2.6±1.7 vs 55.2±16.0, p=0.05) had significant association with postoperative SIRS. Predictive values for sepsis (2.5±1.7 vs 3.2±1.8, p=0.006), Staghorn stones (12.8% vs 3.24%, p=0.008), high BMI (27.3±1.9 vs 25.1±2.9, p=0.03), Diabetes (50% vs 17.7%, p=0.04), low LMR (2.6±1.7 vs 4.07±2.8, p=0.02), high stone density (993±253 vs 753±407, p=0.008). Length of hospital stay (days) increased in SIRS (3.50±1.7 vs 2.22±1.75, p=0.00003) and Sepsis (3.34±1.69 vs 2.34±1.78, p=0.001). Cut
off for NLR, PLR and LMR to predict SIRS and Sepsis was 2.03 & 2.45, 110.62 & 120.25 and 3.23 & 2.88 respectively. 

Conclusion: NLR, PLR and LMR can be useful independent, easily accessible, cost-effective predictors for early identification of post PNL SIRS/sepsis.

UBPAP 09
Comparison of the clinical outcomes of 2D, 3D laparoscopic and robot assisted pyeloplasty - A propensity score matched single centre experience
Dr Kanwar VS, Dr Kumar A, Dr Kumar S, Dr Rao S, Dr Kumar S, Dr Prashant YM, Dr Iyer S
Safdarjung Hospital and VMMC, New Delhi

Objective: To assess the clinical and patient reported outcomes of laparoscopic pyeloplasty (2D/3D) and Robotic assisted laparoscopic pyeloplasty in patients with UPJO.

Materials and Methods: A propensity score matched single center study conducted with 90 adult patients undergoing dismembered Anderson-Hynes pyeloplasty by a single surgeon between January 2016 and March 2021. The patients were divided into three groups- Group A 2D laparoscopic pyeloplasty (2DLP), Group B 3D laparoscopic pyeloplasty (3DLP) and Group C robot assisted laparoscopic Pyeloplasty (RALP), which were compared for patient demographics, operative time, hospital stay, perioperative complications, blood loss, duration of surgery, outcome, pain score and surgeon fatigue index (SFI).

Results: Patient’s demographic data and co-morbidities were comparable in all three groups. The mean suturing time/mean total operating time in our study was 47/90 minutes for Group A, 42/81 minutes for Group B and 25/68 minutes for Group C and the p-value was statistically significant (p<0.0001). The mean blood loss, intra-op and post-op complications, mean pain score, success rate and was comparable in all groups. SFI was statistically significant in RALP (p<0.0001).

Conclusion: All the three modalities of pyeloplasty are equally effective in treating pelvic PUJO with comparable patient-reported outcomes at 3-month and 1 year follow-up. However, RALP merits over 2D/3D LP with lesser mean operative time, mean suturing time along with better surgeon fatigue index (SFI) score.

USI Best Video Prize Session
UBVP 01
Laparoscopic deroofing of renal hydatid cyst with Palanivelu Hydatid System - an early experience
Dr Selvin Theodore, Dr Jayanth E, Dr Sudindra J, Dr Santhosh N, Dr Chandra Singh J, Dr Devasia A, Dr George AJP
Christian Medical College, Vellore

Introduction: Hydatid disease is endemic in India. Renal hydatid is rare. Minimally invasive techniques are gaining popularity. This study aimed to describe its laparoscopic management using Palanivelu Hydatid System (PHS). Materials and Methods: Retrospective review of patients with renal hydatid from June 2004 - May 2021. The surgical technique of laparoscopic deroofing with PHS and peri-cystectomy is discussed. Procedure: Preoperatively, 12 weeks of Albendazole at 400 mg twice daily was prescribed. The PHS consists of a hollow trocar with a fenestrated tip and cannula with two separate suction channels. The trocar is introduced overlying the cyst and the cannula connected to suction is placed in contact with the cyst. The trocar is introduced into the cyst, and spillage is prevented by suction into the trocar and cannula. The cavity is evacuated and visualized with a telescope. Hypertonic saline or 10% betadine is instilled for 10 min, and the cyst is marsupialized or excised. The advantage of the PHS is controlled puncture and prevention of spillage of hydatid contents while ensuring complete evacuation. Results: Twenty-one patients were treated in this period [twelve men and nine women]. The diagnosis of renal hydatid disease was achieved using ultrasonography in 6 patients and computed tomogram in 15. Three patients underwent laparoscopic deroofing with PHS followed by peri-cystectomy. There was no spillage or other complications. At a median follow-up of 2 years, the patients are asymptomatic with no recurrence. Conclusions: PHS is effective in the laparoscopic management of Hydatid cysts and can become standard of care.

UBVP 02
Laparoscopic Extraction of Intravesically Migrated Inguinal Hernia Mesh
Dr Rohith G, Dr Nayak P, Dr Das MK, Dr Mandal S, Dr Gaur AS, Dr Kumaraswamy S, Dr Misra A
AIIMS Bhubaneswar

Introduction and objective: Mesh migration/erosion into abdominal viscera following inguinal hernia meshplasty is rare, and the urinary bladder is the most common organ involved. We present the case of an elderly male with intravesical migrated mesh who underwent a successful laparoscopic mesh extraction.
Methods: A 49-year-old man presented with storage lower urinary tract symptoms (LUTS) and hematuria for one month. He underwent TAPP repair for a left inguinal hernia six years ago, which recurred within six months. He developed strangulation and left inguinal abscess three years later, which was repaired. Postoperatively, he developed a urinary fistula which was conservatively managed. He also developed a right inguinal hernia a year ago, for which open herniorrhaphy was performed which recurred too. On radiological and cystoscopic examination, the mesh was seen on the left anterolateral wall of the bladder. Laparoscopic exploration was done, and the mesh extraction was done. The bladder was repaired in a single layer, and a Foley's catheter and drain were inserted.

Results: The patient had an uneventful postoperative recovery. The drain was removed on postoperative day (POD) six, and he was discharged on POD 10. His Foley's catheter was removed on POD 21 after performing a cystogram. The patient is asymptomatic at a one-year follow-up.

Discussion: Mesh migration into the urinary bladder should be considered a differential diagnosis in patients with a history of TAPP presenting with LUTS and/or hematuria. Extraction is challenging, and at times, a partial cystectomy may be needed to ensure complete removal.

UBVP 03
Retroperitoneal laparoscopic excision of giant cystic pheochromocytoma

Dr Midhun Mohan, Dr Rohan Rajendran, Dr Sanjeevan KV, Dr Appu Thomas

Amrita Institute of Medical Sciences, Kochi

Introduction: Pheochromocytoma are rare neuroendocrine tumours that form in chromaffin cells of the neural crest during embryonic period. Giant pheochromocytoma (>8cm) is very rare, and for this open surgical approach is preferred. Minimal invasive surgery for resection of large pheochromocytoma is very challenging. Here we report a video of excision of a giant cystic functional pheochromocytoma (17cm) through retroperitoneal laparoscopic approach, which is the first in literature.

Method: Case Report - 56-year-old hypothyroid female with no history of any other comorbidities or any history of trauma presented with history of painless swelling in the Right hypochondrium which she noticed on self-examination and gradually increased in size for the last 5 months. On clinical examination, a nontender mass of approximately 15 x15cm was palpated in the right side of abdomen. All routine blood investigations including tumour markers were within normal limits. Contrast enhanced CT scan of the abdomen showed a 17 x16 x15 cm in the right suprarenal area displacing the kidney medially. Metabolic evaluation showed elevated urinary catecholamines.

Patient was stabilised and retroperitoneal laparoscopic adrenalectomy was done. Pathology revealed pheochromocytoma with a PASS score of 5.

Conclusion: Very limited literature is available regarding laparoscopic excision of giant pheochromocytoma and this is the first case of functional cystic pheochromocytoma operated laparoscopically by retroperitoneal route. This video is reported for its rarity.

UBVP 04
Partial urogenital mobilization for feminizing genitoplasty in 3 patients presenting with DSD.

Dr Mukesh C Arya, Dr Ankur Singhal, Dr Ajay Gandhi, Dr Prabhnoor Singh, Dr Rakesh Maan, Dr Pranjal Moharjal

Sardar Patel Medical College, Bikaner

Aim: To identify and classify the patients presenting with urogenital sinus and to demonstrate key surgical steps in its management.

Material and Methods: Three children from an age range of 3-7 years presented to us with ambiguous genitalia and persistent urogenital sinus. All patients underwent a thorough history and clinical examination along with serum biochemistry including cortisol, ACTH, 17-OHP, Electrolytes (Na+, K+). Also, Karyotyping and Radiological investigations (MRI and Genitogram) were done to define the confluence and association with DSD. Preoperative endoscopy was done in every case to determine the exact level of confluence, length of the common channel and the proximal urethra. All these 3 children were amenable to correction by partial urogenital mobilisation with good cosmetic outcomes and urethral preservation.

Results and Discussion: These 3 children are in continuous follow-up and none of them has reached the adolescent age. All of them have perfect continence and their parents have complete satisfaction with their cosmetic appearance.

Conclusion: Proper evaluation should be done before an attempt at surgery. A multidisciplinary team including psychiatrists, endocrinologist is required because if it involves multiple systems - Syndromic approach. The surgeon should have prior experience/assistance to optimise surgical results as it is a basic surgery for any feminizing genitoplasty.

UBVP 05
Supine PCNL in infants - a case series

Dr Hemnath Anandam, Dr Chandra Mohan V, Dr Ramkrishna P, Dr Siddalinga Swamy, Dr Soundarya G, Dr Manas Babu, Dr Rakesh Panda
Introduction: Treatment of nephrolithiasis in infants is challenging. In adults, there is recent change in trend in doing PCNL in supine position because of advantages such as better airway management, easy removal of fragments, shorter operative time and ability to perform ECIRS. But literature is lacking regarding the feasibility and safety of supine PCNL in infants. In this video we present series of 3 cases of supine PCNL in infants to assess its feasibility and its pros and cons.

Materials and Methods: Case 1: 9 months female baby - Right renal pelvic calculus 9 mm and lower calyceal calculus 5 mm.
Case 2: 12 months male baby - urethral calculus 14 mm and 4 mm and multiple right renal calculi, largest 10 mm.
Case 3: 12 months male baby - recurrent UTI, multiple left renal calculus. Flexible ureteroscopy showed large junks of matrix material.

Results: Supine PCNL could be successfully completed all 3 patients. Mild hematuria was found post-operatively in 2 patients. Stone free rate was 100% at 2 months. Advantages were ease of positioning, anaesthesiologist comfort, gravity aided fragment retrieval and accessibility to all calyces from lower calyx. Disadvantages were difficulty in puncture and dilatation due to hypermobility of kidney.

Conclusion: Supine PCNL in infants is feasible as in children and adults. Large scale studies are required to ascertain its outcomes and safety.

UBVP 06
Cat-tail Ureteral reconstruction for bilateral ureteric strictures
Dr A Parikh, Dr A Singh, Dr D Panikh, Dr A Ganpule, Dr R Sabnis, Dr M Desai
M PUH Nadiad

Introduction: Incidence of bilateral ureteric stricture disease presenting to a urologist is decreasing. The commonest cause of a ureteric stricture today is iatrogenic. There are myriads of options for surgical management of segmental ureteric strictures. These management options include ureteric re-implantation, Boari flap, transuretero-ureterostomy, uretero-ureterostomy and uretero-pyelostomy. In this study we describe use of single 15- 20 cm ileal segment for reconstruction of bilateral long length (involving more than 2/3rd ureter) ureteric strictures.

Patients and Methods: A retrospective analysis of 6 cases operated for bilateral long length ureteric strictures, using a single segment ileal interposition in cat tail configuration was done. The case records of all these patients operated between 2015-2021 were reviewed.

An approval was obtained from institutional review board and the study was carried out as per the Good Clinical Practice guidelines and the principles of the Declaration of Helsinki.

Objective: Video demonstration of cattail ureteral replacement

Results: All Patients maintained their baseline renal function at follow up. Paralytic ileus was the most bothersome complication.

Conclusion: Use of a ileal segment in cat tail configuration for bilateral simultaneous ileal replacement is a feasible and safe option. The medium term result state that it is effective in preservation of renal function and provides a good conduit for drainage.

UBVP 07
A novel technique to decrease warm ischemia time in laparoscopic partial nephrectomy with use of satinsky vascular clamp
Dr Chandramohan V, Dr Ramakrishna P, Dr Siddalinga Swamy PM, Dr Panda R, Dr Hemnath UA, Dr Soundarya G
Hyderabad

Introduction & Objective: Laparoscopic Partial nephrectomy(LPN) is an established treatment option for small renal tumors, usually less than 4cm. Many case series have proved that Warm Ischemia Time (WIT) >30 minutes has adverse impact in long term renal function. It is difficult to do LPN with less WIT in Postero-lateral & Hilar tumors. Objective of this study is to decrease Warm ischemia time with use of Satinsky Vascular Clamp.

Method: Patients with small renal tumors were planned for LPN. Port positions and initial colon mobilisation were done according to standard LPN. Kidney was mobilised all around & ureter identified. Renal artery & vein isolated. After clamping these with Bulldog, kidney was flipped by Satinsky vascular clamp. Then inner layer was sutured & renorrhaphy completed. We have presented 3 cases of LPN in this video presentation.

Result: From 2020 July to 2021 January, 05 cases of LPN were done. Mean tumor size was 4.5cm. Mean age of patients was 54.2 years. WIT duration ranged from 17-19 minutes. We could do LPN with WIT < 20 minutes by use of above technique. In all the cases surgical margin was free, no cases of urinary leakage, 1 case had minor bleeding, which was managed conservatively. All cases on follow-up after 3 months, had good renal uptake in DMSA Scan.

Conclusion: With use of Satinsky vascular clamp, we could flip & stabilize the kidney and suture faster. With better ergonomics this clamp decreases WIT significantly in LPN.
Introduction: Renal cell carcinoma is known to extend as venous tumor thrombus. Incidence is 6-10%, more on right side of renal tumor. There are four levels of extension of tumor thrombus. Level II tumor thrombus is extending from renal vein to sub hepatic portion of IVC. We are presenting video on Laparoscopic IVC thrombectomy for Level II thrombus.

Methods: After general anesthesia, pt is placed in left lateral position with right side up. Standard 4 ports were placed. Colon was reflected down and IVC was identified. Ureteronadal packet was ligated over psoas muscle. Hilum was dissected. Renal artery was clipped and cut. IVC was completely mobilised in renal area and opposite renal vein was identified and loop was placed around. Cephalic extension of tumor thrombus was judged above it. IVC was mobilised circumferentially and sling was looped across. Lumbar vein was clipped. Inferior control of IVC was taken. After this slings were tightened and hemostasis checked. IVC was opened and tumor thrombus along renal mass was dissected off. IVC was repaired with proline 3-0 suture. Slings were released and IVC flow was restored.

Results: Patient tolerated procedure well. Total operating time was 2 hour 20 minutes. Blood loss was 200 ml. Pt discharged on 4th pod. 1 Yr follow up with PET CT was normal.

Conclusion: LAP IVC thrombectomy for level II thrombus with step by step lesson learnt is safe and key to success for this procedure.
Vinci Xi system, enables switching the robotic instruments and camera between the four ports, thereby completing complex procedures without changing patient position intra-operatively.

UBVP 11
Robotic assisted pelvic surgery for complex urological malignancy: how far can we go?
Dr Patel Rajkumar, Dr Adhikani K, Dr Raghunath K, Dr Tejus C, Dr Anilkumar T
HCG cancer center, Bengaluru

Introduction: Robotic platform has established role over open and laparoscopic surgery in complex oncological surgery. Open pelvic surgery poses real challenge due to depth of surgical field, limited visibility & limited manoeuvrability. We demonstrate a surgical video for complex prostatic malignancy in a young male, operated with robotic assistance, which impacted functional outcome significantly.

Methods: A 28-year, male presented with locally advanced, large (6.7 x 5.2 x 5.7 cm) prostatic mass (poorly differentiated carcinoma with squamous and neuroendocrine differentiation) with enlarged pelvic lymphnodes and possible rectal wall and bladder neck invasion. Due to progressive disease on neoadjuvant chemotherapy (CT), young age and aggressive cancer, he was planned for robotic assisted total pelvic exenteration.

Results: Due to quality of life issues with urinary and fecal diversion, patient and surgical team were in favor of avoiding diversions if oncologically safe. We planned and reserved the decision to avoid diversions as per intra-operative findings and surgical planes. Due to preserved surgical planes between bladder and tumour & possibility of primary rectal wall excision in toto & closure, the procedure was successfully completed as radical prostatectomy without diversions & bladder preservation. The final histopathology showed ypT4N1 disease (Rectal serosal involvement) with negative margins. Patient is fully continent & disease free at 8 months of follow up.

Conclusion: Though open/laparoscopy approach offers standard oncological outcomes, Robotic assistance provides excellent vision & manoeuvrability of instruments to achieve ‘optimal’ oncological clearance with ‘good’ functional preservation in selected complex pelvic malignancies.

UBVP 12
Robot assisted augmented anastomotic appendicetal flap ureteroplasty for right ureteric stricture
Dr Sunil Kumar
AIIMS Rishikesh

UBPOS 01
Development and internal validation of a nomogram predicting positive lymph node following robotic radical prostatectomy in patients with prostate cancer
Dr Gopal Sharma, Dr Danny Darlington, Dr Puneet Ahluwalia, Dr Ashwin Sunil Tamhankar, Dr Saurabh Patil, Dr Shanky Singh, Dr Gagan Gautam
New Delhi

Introduction: Predicting probability of lymph nodal metastasis using preoperative variables could have clinical and prognostic implications. Such predictors are well known for Western literature, however, the data for Indian population is lacking. With this study, we aimed to develop a nomogram for predicting probability of lymph nodal metastasis in patients with prostate cancer following robot-assisted radical prostatectomy (RARP).

Methods: In this retrospective analysis, we queried our RARP database to identity patients who underwent lymph node dissection during RARP. We used least absolute shrinkage and selection operator method to identify predictors’ of positive lymph nodes after RARP. A nomogram using such predictors was developed and internally validated with boot strapping, goodness of fit, calibration plot, decision curve analysis (DCA) and receiver operating curve analysis.

Results: Of 688 patients who underwent RARP, 427 patients were included of which 119 (27.9%) had positive lymph nodes on pathological analysis. Prostate specific antigen, prebiopsy MRI staging (localized vs. extraprostatic extension vs. seminal vesicle invasion vs. enlarged lymph nodes), percentage of cores positive and International Society of Urological Pathology grade of biopsy specimen (grade I vs. ≥ grade II) were identified as independent predictors. A nomogram was developed using above mentioned variables which was internally validated and had an area under the curve of 0.78 for predicting positive lymph nodes. On DCA, at a threshold probability of 10% model showed net benefit.

Conclusion: We developed and validated a nomogram for predicting probability of positive lymph nodes in patients with PC following RARP in Indian population.

UBPOS 02
PRAL & LAKE SCORE in diet for kidney stone diseases
Dr Haresh Thummar, Dr Shivang, Dr Keya T, Dr Nelson Z, Dr Nisha T
Vadodara
Introduction and Objective: Incidence of urolithiasis is on rise in developed as well as developing countries. Dietary factors including fluid intake play a major role in the incidence of Urolithiasis. However, there are few region specific systematic studies on the association of dietary factors and Urolithiasis. 100 freshly detected cases of urolithiasis were enrolled in the experimental group by following inclusion and exclusion criteria and pair - matched participants formed the control group. A pre - tested questionnaire was used to gather background information of participants. Dietary intake data for three days was collected by 24 hour recall method and Food frequency questionnaire was used to collect information on frequency of consumption of foods associated with incidence of urolithiasis. Nutrient intake was calculated by diet cal software. PRAL VALUE and LAKE SCORE were calculated using standard formula to assess the renal acid load of kidney of the participants and statistical analysis were carried out using SPSS (26) software. 65% of experimental group and 2% of control group participants had positive PRAL VALUE indicating higher consumption of acid forming foods like meat, legume, egg, chicken, and fish and are strongly associated with increased risk of urolithiasis. Majority of the participants from experimental group had positive LAKE SCORE which is predictive of increased risk of Urolithiasis. Conclusion: A higher intake of non-dairy animal protein increases the risk of Uric acid stone formation. High PRAL value and LAKE score is associated with higher risk of stone formation.

UBPOS 03
When do Alpha Blockers not Work for Functional Bladder Neck Obstruction? A Retrospective Cohort Analysis
Dr Madhur Anand, Dr Puneeth Kumar KM, Dr Himanshu Raj, Dr Sanjoy Kumar Sureka, Dr Aneesh Srivastava, Dr Uday Pratap Singh
SGPGI Lucknow

Introduction: Alpha blockers are useful as initial treatment in FBNO but may fail in one-third patients. Non-responders need Bladder neck incision (BNI). We evaluated variables that predict failure of alpha blockers in FBNO.

Materials and methods: This retrospective study was done from 2012-2020. FBNO was diagnosed in presence of BOOI >40 with video-urodynamic evidence of obstructed bladder neck. Patients initially managed with alpha-blockers for 3-6 months and BNI contemplated only when pharmacotherapy failed. Patients with upper tract changes, upfront BNI or CIC excluded. IPSS score, uroflowmetry, urodynamic studies, ultrasonography done pre- and post-treatment were reviewed. Treatment outcome were defined as complete response (>50% improved Qmax and IPSS score) and partial response (30-50% improved Qmax and in IPSS score) at 3 or 6 months.

Results: 99 patients were analyzed (Mean age 32.13 A± 5.29). Nineteen (19.2%) had complete response at 3 months with sustained response in 17. Fifty-nine (59.6%) patients had partial response at 3 months sustained in 30 patients. 21 patients underwent BNI for failed medical management and 31 for recurrent symptoms at mean follow up of 18.8±3.5 months (12-70 months). The correlation of failure (n=52) with age, IPSS, PVR, Qmax, Pdet@Qmax and BOOI sought with multivariate analysis. Independent predictors were age (p = 0.021), Pdet@Qmax (p = 0.015) and BOOI (p = 0.019).

Conclusion: Nearly half of PBNO patients respond to alpha blockers. Pharmacotherapy is likely to fail in younger patients with high Pdet@Qmax and BOOI > 60

UBPOS 04
Application of the ‘Yang-Monti principle’ in children with iatrogenic ureteral injuries
Dr Sangle A, Dr Javali T, Dr Patil N
Bengaluru

Background: Iatrogenic ureteral injuries in children are rare, due to its retroperitoneal position. The Yang-Monti ileal substitution serves as a good surgical option in injuries with long segment defect.

Objectives: To review the Yang Monti principle of ileal ureter substitution in children with long segment ureteric defects.

Methods: This was a prospective study conducted from 2014 to 2019. Children with iatrogenic ureteral injuries with delayed presentations, undergoing the Yang Monti principle of ileal ureter substitution, were included. At follow up, findings of the CT urogram, functional isotope renogram, and renal functions were the key points monitored. The demographic, clinical profile, operative, postoperative complications and follow up data were collated and analysed.

Results: 14 children with delayed presentations underwent the Yang-Monti principle of ileal ureter substitution. The primary pathology was gangrenous appendicitis, calculus cholecystitis and torsion ovary. Laparoscopic procedures were the commonest approach for the injury. The average time to detection was 7 days. All children underwent an ultrasound guided nephrostomy tube insertion at presentation. The mean length of ureteric injury was 3.75 cm. Intra operatively, one, two or three ileal segments were used according to the length of the ureteric defect. Complications were urinary tract infections, adhesions and leak which were conservatively managed with no redo surgeries. The median follow-up was 4 years. Follow up parameters were normal, with preserved renal functions.

Discussion & Conclusion: In children with iatrogenic ureteral injuries of long lengths, the ‘Yang Monti ileal substitution’ serves as a good and simple option for repair.
UBPOS 05
Thulium fiber LASER Vs Holmium LASER for kidney stones in RIRS (Retrograde intrarenal Surgery): A Randomised controlled trial
Dr Abhishek Singh, Dr Aditya Parikh, Dr Nishanth S, Dr Abhijit Patil, Dr Avind Ganpule, Dr Ravindra Sabnis, Dr Mahesh Desai
MPUH Nadiad

Aims and Objective: To compare the use of Thulium LASER fiber (TFL) with holmium LASER (HOL) in RIRS.
Materials and methods: It was a prospective , randomised, single centre study and included 62 patients with stone size between 1-2 cm. Urolase-SP 50 watt and Sphinx Junior 30 watt Holmium LASER machine was used in arm1 (TFL) and arm 2 (HOL) respectively. A 9Fr IndoscopeTM , 11/13 access sheath and 200 micron laser fiber was used in both groups. Laser energy settings in arm 1 were 0.05-1 J energy and 50-300 HZ frequency. In arm 2 , 0.2-2 J energy and 10-40 HZ frequency was used. Variable’s analyzed included patient demographics , stone volume , operative time, lasing time, pain and complications. Primary end point was to compare the fragmentation rate. Secondary end point was to compare stone clearance rate and complications. Patients were followed up at 24 hours and 30 days with Xray KUB and USG KUB.
Results: Thirty patient in each group were included for analysis. Volume of the stone was significantly more in the arm 1 (503.05 ±424.29) as compared to arm 2 (247.91 ± 227.01) (p value: 0.005). Stone Fragmentation rate was significantly faster (p: 0.003) in the TFL group(66.12 ± 46.05)  as compared to the Holmium group(33.71 ± 31.79).
Complications were comparable and stone free rate was 86.6% in both the groups (26/30).
Conclusion: The stone fragmentation rate for TFL is more than 30 watt Holmium LASER in the settings of RIRS.

UBPOS 06
A Systematic Review of Modeling in Peyronie’s Disease
Dr Pramod Krishnappa, Dr C Manfredi, Dr D Arcaniolo, Dr M Sinha, Dr I Moncada
NU Hospital, Bengaluru

Introduction: Penile modeling to correct the penile curvature in Peyronie’s disease (PD) may be achieved manually (intra-operatively or post-injection) or by using assisted devices (penile traction, vacuum device or penile prosthesis).
Objective: To evaluate the efficacy, safety and satisfaction associated with penile modeling in patients with PD.
Methods: A PROSPERO registered (CRD42021241729) systematic search in MEDLINE and Cochrane Library was done in accordance with PRISMA. PICO: Studies were deemed eligible if they assessed patients with PD (P) undergoing modeling procedures (I) with or without comparative group(C) evaluating the efficacy, safety or patient satisfaction (O).
Results: A total of 23 studies, involving 1,238 patients were included in the systematic review. The majority (n=13) studied penile traction therapy. The studies were of low and intermediate quality (mean Newcastle-Ottawa Scale score of 5.7 and mean Jadad score of 3.3) with a mean level of evidence of 3.4. The range of mean penile curvature at baseline: 31-80.8 degrees. Nine (39.1%) studies found a significant improvement (p<0.05) of penile curvature after penile modeling, ranging between 11.7 and 37.2 degrees. An increase in mean stretched penile length was reported in 7 (30.4%) articles, varying between 0.4 and 1.8 cm. Serious complications such as penile prosthesis malfunctions (3.3%-11.1%) and urethral injuries (2.9%) were only reported for intra-operative manual modeling.
Conclusion: Although individual studies have noted improvement in penile curvature and stretched penile length, specific recommendations regarding penile modeling in PD cannot be provided due to significant heterogeneity and the absence of standardized reporting methods.

UBPOS 07
The role of PET/CT in evaluating early and overall response to systemic therapy for metastatic renal Cell Carcinoma: A future way forward?
Dr Anupam Shukla, Dr Baid A, Dr Pathak A, Dr Srivastava A, Dr Singh UP, Dr SK Sureka
SGPGI Lucknow

Introduction: The role of FDG-PET in evaluating the early response to systemic therapy is not well established and CT guided RECIST criteria is the standard practice.We evaluated the role of FDG PET/CT in this setting compared with existing standard.
Methods: We prospectively observed 48 patients from July 2017 to december 2020 with metastatic RCC on systemic therapy after cytoreductive nephrectomy. We performed first PET/CT scan after 6 weeks followed by every 3 monthly.Response evaluation was done as per the PERCIST (PET-CT) and RECIST (CECT) criteria separately on each patient.Apart from PERCIST,which is based on SUVmax (standardized uptake value)total lesion glycolysis (TLG) and metabolic tumor volume(MTV)were also assessed.Interrater agreement was done using Cohen’s kappa between the scores.
Results: Among our patients, Sunitinib was given to 12 patients and pazopanib to 22. Everolimus and Axitinib were given to 6 and 8 patients respectively. In 20 patients out of 48, we have performed PET/CT at 6 weeks to evaluate early response, out of which 14 patients who have shown partial response as per PET-CIST CRITERIA and shown better long term outcome as compare to six patients. The use of PET CT led to upgradation to Stable Metabolic Disease in 2 and Progressive Metabolic Disease (PMD) in 6 patients. This led to a change in therapy in these patients with PMD.

Conclusions: We found that PET/CT is useful for evaluation of early and overall response of systemic therapy in metastatic RCC and may be the candidate for future standard.

UBPOS 08
A pilot single centre prospective comparative study of two digital single use flexible ureterorenoscopes - Indoscope (Bioradmedisys, Pune, India) and 7.5fr uscope pu3033a Zhuhai Pusen, China
Dr Agrawal Shashank, Dr Sabnis Ravindra, Dr Singh Abhishek, Dr Ganpule Arvind, Dr Desai Mahesh
Muljibhai Patel Urological Hospital, Nadiad

Introduction And Objectives: A single-use digital flexible ureteroscope (fURS) has become a cost-effective alternative option to reusable fURS. Requirement of large diameter access sheath for passage of 9.5 Fr single-use fURS have not always achieved in the first attempt in all cases leading to stage stone clearance. Recently two slimmest single-use digital disposable fURS have been introduced by Bioradmedisys and Pusen to mitigate the accessibility problem, without or with small size access sheath. Primary objective was to compare in-vivo performance and surgical outcomes with two single-use fURS: 7.5Fr Indoscope (Bioradmedisys Pune, India) and 7.5Fr Uscope PU3033A (Pusen, Zhuhai, China).

Methods: 60 patients undergoing Retrograde Intrarenal Surgery (RIRS) with < 2cm renal stones, were prospectively randomized into: Group1 (30 patients) for Indoscope and Group2 (30 patients) for Uscope PU3033A. Pre-operative, intra-operative, and postoperative parameters were evaluated. In-vivo visibility, maneuverability was rated on 5-point Likert scale by operating surgeon. At one-month stone clearance was assessed with ultrasound and X-ray KUB. Data was analyzed using SPSS 24.0.

Results: Patient demographics and stone characteristics were comparable in both groups. The Indoscope had significantly higher visibility (p<0.05) than Uscope, however the maneuverability scores were comparable between both the groups (p>0.05). One patient in group1 needed ureteral dilatation before scope insertion (p=0.31). 28 patients in group1 and 26 patients in group2 achieved complete stone clearance (p=0.38). Scope failure was seen in 1 case of group 2 (p=0.31).

Conclusion: We conclude that 7.5Fr Indoscope has better vision than 7.5Fr Uscope and rest of in-vivo performance were comparable with similar outcomes and complications amongst both scopes.

UBPOS 09
Clinical and oncological significance of prostatic anterior fat pad removal during robotic assisted radical prostatectomy
Dr Patel Rajkumar, Dr Anilkumar T, Dr Raghunath K, Dr Adhikari K, Dr Tejus C
HCG cancer centre, Bengalore

Introduction: Exact nodal staging is an important pillar of prostate cancer management. Not only prognostication, it may have therapeutic role in isolated micrometastatic disease. Various studies suggest presence of lymphnode (LN) in prostatic anterior fat pad (PAFP). The practice of surgical removal and sending it separately for histopathological examination (HPE) is variable. We analyzed our radical prostatectomy (RP) data to understand its significance.

Methods: It’s a standard practice at our institute to remove PAFP completely and send it for HPE separately. We retrospectively analyzed HPE reports of patients underwent robotic RP from June 2016 to June 2021. The incidence of presence of LN in PAFP, the number of LN identified and its malignant involvement was documented.

Results: After removing HPE reports with incomplete information, we analyzed data of 220 reports. Twenty four out of 220 patients (10.9%) had presence of LNs in PAFP. Out of 24, four patients had 3 LNs, three patients had 2 LNs & seventeen patients had single LN. Five out of 24 patients had positive LN involvement (20.8%). Two out of 24 patients had isolated LN involvement in PAFP (8.3%) & three patients had combine PAFP & pelvic LN involvement. The disease upstaging was documented in 2 out of 220 patients (0.9%).

Conclusion: Presence of LN in PAFP is common. It is important to see radiologically for presence of LN in PAFP. It is advisable to remove it completely & send it separately for HPE to get an exact staging, prognostication & possible therapeutic effect.

UBPOS 10
Are we experiencing stage migration in renal malignancies in Covid era
Dr Gupta A, Dr Patil A, Dr Patel D, Dr Singh A, Dr Ganpule A, Dr Sabnis R, Dr Desai M
Muljibhai Patel Urological Hospital, Nadiad
Introduction: The COVID-19 disease, caused by SARS-CoV-2 virus, attained the status of a pandemic by March 2020. There was apprehension among patients suffering from renal malignancies about balancing cancer treatment and preventing Covid-19 infection transmission.

Materials and methods: We analyzed 184 patients with renal malignancies retrospectively, who presented to our institute over 2 years. 91 patients of renal malignancies in pre-COVID era (March 2019-Feb 2020) and 93 patients in COVID era (March 2020- Feb 2021). The parameters analyzed were age, tumor size, clinical presentation, pathological stage, nuclear grade and presence of metastasis. Level of significance was kept at 85% and p value <0.05 was considered significant.

Results: Tumor size was 5.84 ± 3.03cm vs 7.10±3.83cm (p: 0.014) in pre-COVID vs COVID era respectively. Pre-op clinical stage (p: 0.04), pathological stage (p: 0.027), nuclear grade (p: 0.007) and presence of metastasis (p: 0.005) were statistically significant. Patients, who underwent Nephron-sparing surgery, also had higher pathological stage in COVID era as compared to pre-COVID era. Age and clinical presentation did not reach significance but there were more symptomatic patients in COVID era(75 vs 66).

Conclusion: There was a clear shift and stage migration in patients of renal malignancies in COVID era as compared to pre-COVID era. There were more symptomatic patients with higher stage and larger tumor size, presenting to medical facility for treatment in COVID era as compared to pre-COVID era, probably because of less routine health check-ups and patients deferring hospital visits due to fear of contracting COVID infection.

UBPOS 11
Clinicopathological characteristics of renal masses: Single Centre experience from North India
Dr Saket Singh, Dr Rajeev Ranjan, Dr Ravimohan S Mavuduru, Dr Girdhar Singh Bora, Dr SK Singh, Dr Uttam Kumar Mete, Dr Santosh Kumar
PGIMER Chandigarh

Introduction: Renal cell carcinoma (RCC) is third most common urological cancer with increasing incidence. The clinicopathological characteristics of RCC in Indian patients are sparsely reported. We report the analysis of patients with RCC from a single center in North India.

Material And Methods: This was a retrospective study conducted at tertiary care center in northern India from January 2013-June 2019. The prospectively maintained data of operated renal masses were analyzed. Clinical presentation, comorbidities, preoperative imaging findings, surgical approach, histopathology, recurrence and mortality rates were recorded. Patients who lost to follow up or with incomplete data were excluded.

Results: 972 patients were included. Mean age of presentation was 53.09±1.30 years with male predominance(65.5%). 649(66.8%) patients were symptomatic at presentation. Pain(39%) followed by haematuria(23.7%) were the most common symptoms. Most of the cases were localised at the time of presentation, but 11.4% of patients had metastatic disease. 45(4.6%) patients had IVC involvement, out of which 37(82.2%) were subdiaphragmatic and 8(17.8%) were supradiaphragmatic. Clear cell(71.2%) followed by papillary(10%) and chromophobe RCC(6.7%) constituted majority of the histopathology type. Most of the cases were managed by minimally invasive surgeries(laparoscopic-48.8%; robotic-12.4%), with open approach in 377 cases(38.8%). Mean follow up was 51.81±20.49(range;18-95) months. Recurrence(local or metastatic) was observed in 95(9.8%) patients. Median progression free survival was 20 months. 84(8.6%) patients expired during the follow-up period.

Conclusion: From this large database we found that RCC occurs a decade earlier and is mostly symptomatic even in localized stage, than those reported from western literature.

UBPOS 12
An initial experience with Robot-Assisted Inguinal Lymph Node Dissection (RAILND) and comparison with Video-Endoscopic Inguinal Lymph Node Dissection (VEILND) in penile cancer.
Dr Patel Amit, Dr Boaz RJ, Dr Kumar V
Senior Clinical Fellow

Introduction & Objectives: Radical lymph node dissection is the standard of care for inguinal lymph node metastasis in penile cancer. Significant morbidity persists despite various modifications to open surgical technique. VEILND performed in high-volume centres has been shown to reduce morbidity associated with Open ILND. Intuitively, the fine movements and enhanced vision of the robotic system lends itself to improvements in the procedural aspects of ILND. We present our initial experience with RAILND, study its feasibility, and compare outcomes with VEILND.

Materials & Methods: Minimally invasive ILND was performed for 26 groins in 18 patients. 13 groins in 8 consecutive patients had VEILND and 13 groins in 10 consecutive patients had RAILND. Ethics approval was obtained from the new procedure committee of our institution.

Results: The mean lymph node yield in RAILND was 7.85 (range 4-13) which was comparable to 7.95 (5-11) in VEILND. There was no significant difference in length of stay (1.54 for RAILND and 1.11 for VEILND). There were no complications higher than Clavien grade 2 in either arm. One Clavien grade 2 complication in the
RAILND group warranted readmission while there were no significant complications with VEILND. Mean follow up was 4 months for RAILND and 11 months for VEILND.

Conclusions: This study demonstrates non-inferiority of RAILND when compared to VEILND with regard to intra-operative and short-term complications. No significant difference was observed in lymph nodal yield, an established surrogate for oncological outcome. Randomised trials with longer follow-up will further consolidate the evidence.

UBPOS 13
Use of Proctored-Preceptorship model to initiate Arterio-venous Fistula Surgery Program - Initial experience and Technical Learnings
Dr Bansal D, Dr Mittal S, Dr Sharma B, Dr Mathur P
Santokba Durlabhji Memorial Hospital, Jaipur

Introduction and Objective: Arterio-venous fistula (AVF) surgery is an advanced microsurgical transplant-associated procedure. Proctored-preceptorship model has been shown to help overcome learning curve of surgical procedures. We evaluated this model to establish AVF program at our center and analyzed surgical outcomes and technical learnings.

Methods: Peri-operative outcomes of patients undergoing AVF were maintained in a prospective database since initiation of program in January 2021. Study duration was 6 months. There were two operating surgeons, one experienced and another within learning curve, the latter independently performing AVF by study end. Demographics, operative and anastomosis time, intra- and post-operative complications and primary success rate were recorded. Telephone interview was done at 6 months to assess follow-up success. Learning points during study period were detailed.

Results: Twenty-five patients underwent 26 AVF surgeries (21 radiocephalic, 5 brachiocephalic). Mean patient age was 48±15 years. Median blood loss was 50 ml (IQR 0-50 ml) and mean anastomotic time 14.1±7.2 ml. Primary success rate was 92.3%. Two patients had primary failure, one underwent successful BC AVF surgery later. There were two Clavien-Dindo Grade 1 complications. All had a working AVF.

Conclusion: Proctored-preceptorship model helps in initiation of AVF surgical program with high success rate. Proper patient selection and technical points described above are key to success.

UBPOS 14
Bladder cancer in young adults - Presentation, clinical behaviour and outcomes from a tertiary care center
Dr Singh P, Dr Sachan A, Dr Nayak B, Dr Singh P, Dr Seth A
All India Institute of Medical Sciences, New Delhi

Introduction and Objectives: Bladder cancer is usually seen in older population with a paucity of literature concerning the disease in young adults. We aimed to study the bladder cancer presentation, clinical behaviour and outcomes in young adults.

Methods: This was a retrospective study including carcinoma bladder patients younger than 50 years who underwent treatment at our center from March, 2015 to March, 2021.

Results: A total of 192 such patients were identified out of which 62 patients belonged to 18-40 yrs age group. The most common presenting complaint was hematuria. Most common histology was urothelial carcinoma (96.8%). High grade, low grade and PUNLMP was present in 56.1%, 43.3% and 0.5% patients, respectively. The distribution of Ta, T1 and T2 disease on TURBT was 40.1%, 33.7% and 26.2%, respectively. Recurrence rate after TURBT was 42.1% for the overall group, 31% for 18-40 yrs age group and 47.6% for the 41-50 yrs age group. Progression rate after TURBT was 14.3% for the overall group, 9.5% for 18-40 yrs age group and 16.7% for the 41-50 yrs age group. The median recurrence free survival was 36 months each for the overall group and for the 41-50 yrs group whereas it was not reached for the 18-40 yrs group.

Conclusion: The most common histology, stage and grade in young adults with carcinoma bladder is urothelial carcinoma, Ta and high grade.

UBPOS 15
Radical Nephrectomy with inferior venacaval thrombectomy by using liver transplant technique for level 3 and level 4 thrombus - A single centre experience
Dr Prasad SR, Dr P Modi, Dr J Rizvi
IKRDTCAhmedabad

Introduction And Objectives: Incidence of Renal Cell Carcinoma (RCC) with Venous Tumor Thrombus is 4 to 10%. RCC with Inferior venacaval (IVC) thrombus is curable with surgery in 45-70%. Mortality rate of Radical nephrectomy(RN) and IVC thrombectomy is as high as 5% to 10%. Objective is to provide clinical data on
outcomes following IVC thrombectomy for level 3 and 4 tumor thrombus and how liver transplant technique is an effective alternative to bypass for level 4 cases.

Methods: From 2010 - 2020, 19 RCC patients with level 3 thrombus and From 2016-2020 4 patients with level 4 thrombus underwent RN and IVC thrombectomy. Data was obtained retrospectively.

Results: In patients with level 3 thrombus immediate postoperative mortality was due to pulmonary embolism (2), pneumonia (2), myocardial infarction (1). Late mortality due to metastatic disease (4). Mortality in patients with level 4 thrombus immediate postoperative due to septic shock (1), mortality within 1 year of surgery due to metastatic disease (2). 2 patients with level 3 and 1 with level 4 IVC thrombus lost to follow up. No intraoperative mortality in level 4 patients with liver transplant technique.

Conclusion: 1) Liver transplantation technique provides excellent exposure and control of IVC in cases with level 3 and level 4 tumor thrombus. 2) As the level of thrombus increase the mortality rate increases with surgery alone. With advances in immunotherapy, survival of these patients may increase if aggressive surgery is combined with immunotherapy.

UBPOS 16
Predictors of successful management of Renal Calculus Disease in Horseshoe Kidney. Experience from A Tertiary Centre.
Dr Ritesh Goel, Dr Siddharth Jain, Dr Amlesh Seth
All India Institute of Medical Sciences, New Delhi

Introduction: Horseshoe kidney is a rare congenital anomaly resulting from fusion of lower pole leading to medial and caudal deviation of kidneys that pose challenges to successful stone clearance.

Material and Methods: 36 patients with urolithiasis in horseshoe kidney from 2012-2019 were included with a median age of 38 years (11-56 years). Mean calculus size was 39.27 mm (21-70mm). 22 patients had left, 10 had right and 2 patients had bilateral calculus disease. 12 patients (33%) had previous intervention done for renal calculi. As per Guy stone score, 14 patients had Grade 4, 16 patients had Grade 3 and 6 patients had Grade 2 disease. Of these patients, 26 underwent PCNL, 6 had pyelolithotomy, 2 had Right renal moiety nephrectomy and 2 patients underwent SWL.

Results: Six patients undergoing pyelolithotomy had complete clearance. One patient undergoing SWL required flexible URS for residual calculi. In PCNL, infra-costal puncture was done uniformly. Complete clearance was seen in 12 cases out of 16 with superior calyceal access (75% SFR), 2 out of 8 with middle calyceal puncture (25% SFR) and both the cases with inferior calyceal puncture (100% SFR). Factors affecting stone clearance: Guy Stone score i.e., Grade <4 vs Grade ≥4 (71.4% vs 50%, P=0.42), STONE index less than 12 vs ≥12 (83.3% vs 28.57%, P=0.048), Stone size <4cms vs ≥4 (71.4% vs 50%, P=0.42).

Conclusion: In our analysis stone clearance was independent of mode of access, GSS or stone size. Although, STONE index was a predictor of successful outcomes in PCNL.

UBPOS 17
Efficacy of topical dilitiazem cream combined with local xylocaine to decrease the pain during transrectal ultrasound guided prostate (TRUS) biopsy: A single centre randomized control trial
Dr Midhun Mohan, Dr Kannan Nair R, Dr Appu Thomas
Amrita Institute of Medical Sciences, Kochi

Introduction: Transrectal ultrasound (TRUS) guided biopsy of prostate is the standard test for diagnosing prostate cancer. Pain during TRUS biopsy is believed to be of dual origin, that is pain arising from the introduction and movements of the TRUS probe and secondly during the needle passage through the prostate capsule. Here we evaluate the efficacy of topical 2 % diltiazem ointment as an adjuvant to PPNB and intra rectal xylocaine gel in reducing the pain associated with TRUS biopsy.

Material & Methods: A total of 100 patients fulfilling the inclusion and exclusion criteria were randomized in to 2 groups in the ratio 1:1. For the first group diltiazem gel was applied to the anal ring 10 minutes before the procedure, while the other group received placebo. All the patients then received xylocaine jelly and PPNB using 1% lignocaine. Post procedure based on Stanford Visual pain analogue scale, pain was recorded during the introduction of probe in the rectum, during the PPNB, while taking biopsy and 30 min after the procedure.

Results: Pain score between two groups were statistically assessed using student t test. There is significant reduction in pain during the whole of procedure, especially during the probe insertion in those patients who received topical diltiazem compared to those of the placebo group.

Conclusion: Our study proves that application of 2% diltiazem cream as an adjuvant to PPNB is effective in reducing the pain associated with TRUS guided prostate biopsy especially during the insertion of probe.

UBPOS 18
Comparison of right renal vein stump retrieval with additional IVC cuff using Endo Ta Stappler v/s Hem-O-Lok Clip
Dr Pratik Garg, Dr Vinay Rai, Dr Rohit Kaushal, Dr Pragnesh Desai, Dr Samit Chaturvedi,
Objectives: Laparoscopic donor nephrectomy (LDN) is now accepted as standard of care at most transplantation centres. But there have been concerns regarding quality of graft and vessels after laparoscopic harvest, especially with right sided kidney. We share our experience of laparoscopic right donor nephrectomy comparing the use of Endo TA stapler with hem-o-lok clip for retrieval of maximum right renal vein length.

Methods: From January, 2007 to June 2021, we performed 248 right laparoscopic transperitoneal donor nephrectomies. We used Endo TA stapler in 54 patients and hem-o-lok clip in 194 patient for obtaining full length of right renal vein. In patient using Endo TA stapler, it was applied on IVC and hem-o-lok on right renal vein. It allowed us to take additional length of right renal vein along with cuff of IVC.

Results: With our technique, the entire right renal vein length was harvested in all cases, without vascular complications. Mean additional right renal vein length taken by applying Endo TA stapler was 4 mm along with cuff of IVC. Additional cuff of IVC helped in providing thick vein margin for venous anastomosis in recipient patient. Mean warm ischemia time was 5 minutes (range, 3 to 8 minutes). There were no graft losses.

Conclusions: This technique for laparoscopic live donor right nephrectomy with Endo TA stapler allows harvesting the full length of the right renal vein along with good vascular cuff of the IVC in a safe and feasible way without compromising warm ischemia time.

USI Best Paper Prize for Young Urologists

UBPYU 01
Developing a nomogram for predicting pentafecta outcomes after radical cystectomy in an Indian COHORT
Dr Ravi Chandran K, Dr Shreedhar GK, Dr Appu Thomas, Dr Ginil Kumar KP
Amrita institute of medical sciences, Kochi

Introduction and Objective: Pentafecta criteria (PC) provide a panoramic approach for systematic outcome reporting of radical cystectomy. It's a measure of both oncologic and functional outcomes. We aimed to assess the rate and predictors of achieving PC and to develop a nomogram.

Methods: Patients treated with radical cystectomy and urinary diversion between 2010 till 2018 were retrospectively analysed. Inclusion criteria: Age ≤ 75, ASA score ≤ 3 and urothelial carcinoma ≤ pT3N0M0. Univariate and multivariate binary logistic regression was used to identify predictors for achieving pentafecta. Nomogram was constructed using R software.

Results: 178 patients included. The mean age was 60.4 years, 156 (87.6%) were male, 58 (32.5%) received neoadjuvant chemotherapy (NAC). Pentafecta criteria: < 3 months between TURBT and cystectomy, negative surgical margin, retrieval of ≥16 lymph nodes, absence of Clavien-Dindo grade 3–5 complications within 90 days, and absence of pelvic recurrence within 12 months were achieved in 170 (95.5%), 169 (94.9%), 121 (67.9%), 138 (77.5%), 169 (94.9%) patients respectively. Overall PC were met in 86 (48.3%). Overall survival was found to be higher in the pentafecta attained group (log-rank test, P < 0.001) over a mean follow up of 28.2 months. On multivariate analysis, ASA score, mode of urinary diversion, NAC, hypoalbuminemia, blood loss were significant. Nomogram had higher predictive accuracy and superior calibration.

Conclusions: Pentafecta criteria may serve as a standardized quality assessment tool and help in a better understanding of perioperative disease management. Our nomogram may help in clinical decision making and planning.

UBPYU 02
High-power Holmium with MOSES technology or Thulium Fiber Laser in MiniPerc with suction - A new curiosity.
Dr Abhijit Patil, Dr Naveen Reddy, Dr Darshit Shah, Dr Abhishek Singh, Dr Arvind Ganpule,
Dr Ravindra Sabnis, Dr Mahesh Desai
MPUH, Nadiad

Aims & Objective: To present initial clinical comparison between high-power Holmium with MOSES technology(HPH-M) and Thulium Fiber laser(TFL) during mini-PCNL for renal calculi with specific emphasis on fragmentation efficiency, fragment size distribution and stone-free rates(SFR).

Material And Methods: Between June 2019-Feb 2020, we performed mini-PCNL for renal calculi <3cm using HPH-M(Lumenis, Israel) or TFL(Urolase SP, JP Photonics). Data was collected prospectively in our institutional stone registry. Propensity score matching(1:1) was performed using stone size and density as predictors resulting in matched cohort of 51 patients in each group. MiniPCNL with active suction sheath was standard across all patients. Primary end-point was SFR at immediate post-procedure and 1month using CT/Xray KUB.
Stone fragments were retrieved and segregated to assess proportion of dust (<1mm), small (1-3mm) and large (>3mm) fragments.

Result: Both groups were comparable in terms of stone size (p=0.74), volume (p=0.17) and density (p=0.69). SFR at 48 hours was 78.43% in HPH-M group and 68.63% in TFL group. Patients with residual fragments were completely clear at 1 month. Lasing time (678.6v/s551.95 seconds, p=0.17), stone fragmentation rate (4.6v/s5.2 mm3/s, p=0.23) and total laser energy (21.9v/s16.3 KJ, p=0.09) were comparable in both arms. Both groups produced similar dusting (46.8%v/s46.4%, p=0.93). TFL produced a greater proportion of fragments >3mm (36%v/s23%, p=0.002). On sub-set analysis based on stone density, all outcome parameters were comparable except a shorter total operative time with TFL (41.66v/s23.68, p=<0.05).

Conclusion: HPH-M and TFL showed similar SFR. Within constraints of the laser fiber size and energy settings, both modalities were equivalent in terms of fragmentation efficiency and proportion of dusting across stone densities.

UBPYU 03
Clinical and Pathological Parameters Predicting Operative Difficulty in Laparoscopic Nephrectomy for Renal Tumors.
Dr Pirzada Faisal Masood, Dr Rajeev Sood, Dr Anil Taneja, Dr Anurag Singla, Dr Hemant Goel, Dr Sumit Gehlawat, Dr Shabina Bano
ABVIMS & Dr RML Hospital, New Delhi

Introduction: Renal tumors amenable to laparoscopic surgery is increasing due to increased detection at an earlier stage by imaging along with rapid and progressive improvement in minimal access surgery. Conversion to open surgery remains a problem and should be minimized by proper case selection. We have tried to assess the operative difficulty of laparoscopic nephrectomy in renal tumors preoperatively so as to decrease the chances of conversion to open.

Patients And Method: Sixty-seven patients (46 males and 21 females) with a mean age of 50.78 ± 14.2 years, meeting the inclusion criteria were taken for transperitoneal laparoscopic nephrectomy at our institute between September 2019 to August 2021. Various clinical, anthropometric, and radiological parameters were noted. Intraoperative difficulty was assessed and graded on a scale of 1 (easiest) to 4 (most difficult or open conversion) by a single surgeon along with other parameters of operative difficulty. Parameters were assessed by univariate and multivariate analysis.

Results: In the univariate analysis, Higher ECOG score, Past history of smoking, Perinephric fat stranding, Perinephric fat surface density (in partial nephrectomy group only), Large tumor size (>4cm in partial group and >10cm in radical/cytoreductive group), hilar lymphadenopathy, and advanced tumor stage were significantly associated with intraoperative difficulty while on multivariate analysis, no single factor is independently predicting intraoperative difficulty during laparoscopic nephrectomy for renal tumors.

Conclusion: Feasibility of laparoscopic nephrectomy in renal tumors should be based on a multitude of factors as there is no single factor which can independently predict the intraoperative difficulty and high conversion rates.

UBPYU 04
CRP as an indicator for early intervention in patients with ureteric calculus
Dr Harsha R, Dr Sanjay P, Dr Venkatesh R, Dr Dileep M, Dr Kunal M, Dr Chethan J V, Dr Chaithanya J
Vydehi institute of medical sciences, Bangalore

Introduction And Objective: Inflammation of ureteric wall may impede passage of calculus which reduces the chances of spontaneous expulsion. C-Reactive Protein an acute phase reactant elevates in almost all inflammatory conditions.

To assess if CRP levels can predict need for early intervention in symptomatic ureteric calculus.

Methods: Sample was estimated at 100. Patients 18 years and older were included during the study duration of six months. Ureteric calculus measuring 5-10 mm was subjected to Medical Expulsion Therapy (Tamsulosin 0.4 mg at night). CRP levels estimated on day 1 and day 7 from the presentation. CRP less than 5 mg/L was considered normal, represented as ‘negative’ in the present study; more than or equal to 5 mg/L taken as ‘positive’. Patients who demonstrated rising/elevated CRP were considered for early endoscopic intervention. Data analyzed by SPSS v 19.0

Results: Out of the 100 patients, 47 patients had positive CRP on day 7, of which 7 patients had expelled the stone at the end of two weeks. Out of 53 negative CRP group patients, 33 showed evidence of spontaneous
calculus expulsion within one week and 10 patients at the end of two weeks and 10 patients did not demonstrate spontaneous expulsion at the end of two weeks and required intervention.

The present study showed a statistically significant correlation between the positive CRP levels and the rates of spontaneous expulsion of ureteric calculus (p=0.0001).

Conclusion: CRP may be used as an indicator for early intervention in symptomatic ureteric calculus.

UBPYU 05
Should Ambulatory Tubeless Supine mini-PCNL for stones < 2cm be implemented a new standard in the COVID-19 pandemic for minimizing risk of contagion during hospitalization? A prospective analysis
Dr Jaisukh Kalathia, Dr Kaushal Patel, Dr Arvind Valiya, Dr Giriraj Vala, Dr Kuldeep Agrawal, Dr Ayush Khetarpal, Dr Prathan Joshi
Fortune Urology Clinic, Botad

Introduction and Objectives: To assess the outcomes and feasibility of ambulatory tubeless supine mini PCNL for stone size < 2 cm in the Covid-19 pandemic to minimize hospitalization.

Materials and Methods: Between June 2020 to August 2020, total 48 patients underwent PCNL out of which 22 were prospectively included in the study. Inclusion criteria were those consented for study, size of the stone < 2cm, preoperative Covid-19 negative test (CT-chest and RT-PCR). Those were excluded with solitary kidney, morbidly obese, active UTI, congenital abnormalities.

Results: All patients underwent mini supine PCNL in FOSML (Flank-Oblique Supine modified lithotomy) position through a single tract of size 14 Fr. Only 2 (9%) patients required additional tract because for inaccessible secondary stones. Both source of energy holmium and pneumatic were used for fragmentation. Tracts were supra 12th rib in 6 (27%) and 16 (73%) infra-costal. Complete stone-free rate was achieved in 21 (95%) under fluoroscopy and remaining 1(5%) require4d auxiliary procedures. Average operative time was 60 minutes and no nephrostomy were placed. All the patients were discharged within 24 hours of operation with only 3 (13%) patients needed readmission within 48 hours of discharge.

Conclusion: Ambulatory supine tubeless mini-PCNL is a safe and effective approach in this COVID-19 pandemic era and should be recommended whenever feasible to minimize contagion of patients to hospital workers.

UBPYU 06
Study on outcome and effectiveness of Ureterorenoscope Lithotripsy (URSL), Mini-Percutaneous Nephrolithotomy (MPCNL), Extracorporeal Shock Wave Lithotripsy (ESWL) in the management of upper ureteric stones in a tertiary care hospital
Dr KSNS Udhbhav, Dr RM Meyyappan, Dr T Senthil Kumar, Dr T Srinivasan, Dr J Saravanan
SRM Medical College and Hospital

Introduction: Upper urinary tract calculi are commonly reported in the past few years, treatment of choice selection rely on many parameters such as calculi size, composition and site, signs and symptoms, health care access, patient compliance however its ideal management is still controversial.

Objectives: To analyse the sociodemographic variables among the patients with upper ureteric stones; To study the pattern of presentation of upper ureteric calculi; To study outcome and effectiveness of URSL, MPCNL, ESWL in the management of upper ureteric stones.

Material and Methods: A study conducted among 103 study participants >18 years, diagnosed with upper ureteric stones. Detailed socio-demographic information was collected followed by clinical examination, investigations and surgical management by URSL, MPCNL, ESWL procedures. Data was entered in Excel and analyzed using SPSS.

Results: The study participants mean age is 38.06 +/-11.7 years. 64.1% were female and 35.9% were male. Treatment procedure undergone by study participants were URSL 47.6%, MPCNL 32% and URSL+ESWL 20.4%. Statistically significant association between the various post-op complications across the groups was observed. Flank pain p(0.021), hematuria p(0.0001) and Fever p(0.026). The stone clearance rates observed in this study were 100% for MPCNL, 89.8% for URSL group and 90.5% for URSL+ ESWL group.

Conclusion: We observed that there is need for better understanding of modifiable, non modifiable risk factors and presentation of ureteric calculi to prevention and treatment of ureteric calculi. In this study we observed MPCNL to be a better approach for upper ureteral calculi with a diameter of 10-15 mm compared to URSL and URSL+ESWL.
USI Prize for Ideas and Innovations

UPINT 01
Percutaneous Basket Guided Transurethral Cystolithotripsy (Perc BT CLT) - An Innovation for management of bladder stones
Dr Surya Prakash Vaddi, Dr Seshu Mohan K, Dr Rajesh Reddy KRV, Dr Datta Prasad M, Dr Jawahar B
Yashoda Hospitals, Hyderabad

Introduction and Objective: Minimally invasive techniques for the removal of bladder stones have been widely adopted to reduce the risk of complications and shorten hospital stay. Percutaneous basket guided transurethral cystolithotripsy (Perc BT CLT) is a new technique for the management of bladder stones.

Methods: Six patients with lower urinary tract symptoms and with bladder calculi were treated with our technique of percutaneous basket guided cystolithotripsy (Perc.BT CLT) from April 2021 to July 2021. Patient age group ranged from 45-68 Years and all were males. Stone size ranged from 17mm to 5cm. Stones were single in 4 patients and 2 in two patients. 9F trocar cannula was inserted percutaneously into the bladder. Basket inserted through the trocar to grasp the stone. 17 F Cystoscope with 500 micron laser used for laser lithotripsy and 18F Nephroscope used for pneumatic lithotripsy.

Results: Complete stone clearance was achieved in all the 6 cases. stone fragmentation time ranged from 2 minutes 35 seconds to 25 minutes Bladder mucosal injury did not occur in any of the patient. TURP was done in all the cases and patient discharged on 2nd postoperative day without any complications

Conclusion: Perc BT CLT is an effective, safe and innovative technique for treating bladder calculi. It is minimally invasive, avoids bladder mucosal injury. Large stones can be fragmented quickly and easily with the help of laser or pneumatic lithotripsy.

UPINT 02
Potato tissue based TURP Endotrainer model - Validation and Utility as a training tool
Dr Kamal Sachdeva, Dr Maneesh Sinha, Dr Venkatesh Krishnamoorthy
NU Hospital, Bengaluru

Introduction and Objective: Available simulation TURP models for practicing, have their own disadvantages including utility, realism and cost. In this prospectively designed observational study, we evaluated validity and established utility of cost-effective, easily made potato based model to develop transurethral resection skills before actual TURP.

Methods: 6 trainees and 4 experts performed resection on potato tissue TURP model in our Hospital, and reported their observations on a Likert based questionnaire. Construct validity was assessed on basis of mean ability of transurethral resection between two groups. Pearson correlation was used to check inter-parametric correlations.

Results: The mean overall rating for the experience on potato based TURP model for trainees and experts was 3.67 + 0.52 and 4.0 + 0.82 respectively. The model appropriateness during the 10 minutes resection module (construct validity) was rated by trainees as 3.86 + 0.79 and by experts as 3.91 + 01.24 (p=0.87). The expert group resected more tissue 8.5 ± 0.58 gm vs 5.22 ± 0.52 gm (p= 0.008) in 10 minutes. Experts were better orientated and spares bladder neck (p= 0.0005) than trainees group. Strong co-relation existed between potato tissue model orientation and observer assessment (r =0.704) (p =0.02).

Conclusions: With the proven validity, trainee urologists can establish their practicing technique on this TURP model. 66% residents were confident after 4 sessions of model practice before starting TURP on patients.

UPINT 03
Mucosal Exclusion stitch - A simple and effective solution to mitigate the risk of urinary stones in stapled intracorporeal Robotic ileal conduit
Dr A Odugoudar, Mr Mufti, U, Mr Kotwal S, Mr Prescott S
Clinical Fellow in Pelvic Uro- Oncology

Introduction: Robotic assisted Radical cystectomy with intracorporeal ileal conduit (iRARC) is becoming the standard of care for bladder cancer. The use of Echelon GIA endostaplers has enabled the intra-corporeal conduit formation efficiently and safely. However, the metallic staple act as a nidus for stone formation.
Objective: To study the feasibility and safety of the mucosal exclusion stitch at the stapled proximal end of ileal conduit

Methods: This prospective observational study of patients undergoing iRARC between June 2016 to June 2020 was done at a tertiary specialist centre in the UK. For the intra-corporeal conduit, a stapled 20 cm bowel loop about 20 cm proximal to ileocaecal junction was selected. The staple line at the proximal end was excluded by running 3.0 vicryl continuous suture from anti mesenteric to the mesenteric border and back. As a part of routine follow up patient had CT scan at 3, 12, 24, 36 and 60 months.

Results: A total of 82 patients underwent iRARC, of which 74% were males with a mean age of 69 years. The time to perform the mucosal exclusion stitch was about 5 minutes. Clavien Dindo III and above complications were noted in 6.1%, and 3.7% required blood transfusion. The mean length of hospital stay was 8 days. Median follow-up was 17 months and none (0%) demonstrated stones at the proximal stapled end of conduit.

Conclusion: Mucosal exclusion stitch on the proximal end of the conduit is a simple, and cost-effective technique which mitigates the risk of stone formation in stapled ileal conduits.

UPINT 04
Modification of microdissection testis incision according to the vascular anatomy of the testis
Dr Ramaprasad
Apollo Adlux Hospital, Kochi

Background: The testicular artery after giving off the epididymal branches fan off to the medial and lateral aspects of the testis from beneath the epididymis. The major branches go transversely to the inferior pole of the testis and curves upward crossing the equator of the testis. There is difference in the density of arteries in the various sectors of the testis. The sectors of the tunica albuginea most frequently containing a major superficial artery were the inferior/anterior (98%) and inferior/lateral (79%) sectors followed by the superior/anterior (64%) and inferior/medial (62%) sectors. The sectors least likely to contain a superficial artery were the superior/medial (9%) and the superior/lateral (15%) sectors. (1)

The incision on albuginea has to be made with at most care in order to preserve the vascular supply of the testis.

Aim of the study: To describe a modified incision for mdTESE based on superficial intragonadal vascular pattern to minimize disrupting significant arteries.

Materials and Method: The observations are made in 67 testicles during mdTESE. The sites of significant vascular bleeding during the classical equatorial incision have been recorded. The initial 41 testicles have been dissected through the classical equatorial incision. The rest of the testicles were opened by a modified incision to shorten the medial extend of the incision.

Observations: The transverse branches running from beneath the epididymis in a testis is being depicted in the Picture 2 and Picture 3 (medial and lateral aspects). Unlike the study by Jarrow, we found short branches in the superior lateral aspect also. A significant vessel crossed the equator medially at 9 to 10 o’clock left side or 2 to 3 o’clock positions on the right side in 38 of initial 41 testes. (Picture 4)

Description of the modified incision and rationale: A laterally placed incision avoiding damage to the medial trans equatorial branch is used in the later 26 cases. (Picture 5 and 6) All the quadrants of testes could be dissected in these 26 cases thus not affecting the dissection outcome.

Conclusions: The modified incision avoids any major vessels from being injured during mdTESE compared to the classical equatorial incision and does not hinder proper dissection of the testes.

UPINT 05
Predicting bacteriuria by Machine Learning Software Solutions (MLSS) - An innovative screening tool for pregnant women
Dr N Rajamaheswari, Dr Ilangovan Veerappan, Dr Chandrakala Maran, Dr Harini Sivamani, Dr M. Meena Mahalingam, Dr Muthamil Chelvi Pethakannu, Dr Ananthasubramani Rajagopal
UroGynaecology Research Center, Chennai

Introduction: All pregnant women require a simple urine dipstick test (SUDT) in the office or laboratory and a Conventional Urine Culture Test (CUCT) to confirm bacteriuria. Besides SUDT, subjecting all pregnant women to CUCT can pose challenges with constraints in terms of time and resources. A machine learning software solution (MLSS) with predictive analytics, to recognize the risk of bacteriuria from SUDT is presented.

Objective: Developing a prediction framework MLSS from SUDT, to identify pregnant women who are not likely to have bacteriuria and need not be subjected to CUCT.
Methods: A retrospective single-arm study was done during pregnancy by random recruitment. The sample value of 50 patients was decided using statistical estimation. 6 continuous variables and 11 categorical variables were considered to determine the predictors. The prediction on the probability of bacteriuria was carried out by nominal Logistic regression and framing MLSS.

Results: The Bacteriuria was confirmed in 26% by CUCT. 4 predictors pH, sp gr, pus cells, and age were identified. Albumin and cast were the 2 significant factors identified from 11 categorical variables. The analytics revealed that urine CUCT is not required when Age < 30, pH 6-7, specific gravity < 1.015, pus cells < 4/HPF with absent albumin and cast. The MLSS has 85% Sensitivity, 97% Specificity, 92% Positive predictability Value, and 95% Negative predictability Value.

Conclusion: SUDT using MLSS can predict pregnant women who are unlikely to have bacteriuria and do not require CUCT. MLSS will be beneficial as a screening tool in pregnancy.

UPINT 06
GRH DJS Tracker - A boon in prevention of retained & forgotten DJ stents during Covid 19 & Lockdown.
Dr Arif Ahamad Ansari, Dr S Manimaran, Dr T Gnanasekaran, Dr P Prabakaran,
Dr K Muralidharan, Dr J Induja, Dr P Vijaykumar
Madurai Medical College, Madurai

Background: Retained or forgotten stents (FUS) have a potential to cause significant morbidity and burden of treatment to patient as well as treating Urology team. This had been aggravated by the prevailing scenario of pandemic lockdown. We programmed a user-friendly Android based mobile application (GRH DJS Tracker). The application would automatically send notifications and text message to the patient and respective doctor for reminding about appointment date of DJS removal, one day prior. It also included the feature of scheduling appointments for further ESWL session.

Objective: To study the efficacy of GRH DJS tracker in reducing FUS

Materials and Methods: We conducted a prospective study in 120 patients who underwent Endourological Procedure with DJ insertion between 1st Aug 2020 to 31st July 2021. Patient’s ID, X ray and ESWL records were entered in the GRH DJS tracker and date was scheduled for stent removal.

Findings: Out of 120, 90 patients completed the study for DJS and 30 in the following weeks based on periodic reminders, maximum 6 weeks. There were no cases of forgotten ureteric stents despite the lockdown as compared to the rate of 1.8% in previous 6 months. 78 patients also underwent further ESWL sessions as per the scheduled appointments in the application.

Conclusion: GRH DJS tracker, proved a patient and doctor friendly application and a very useful tool in avoiding instances of FUS in Covid 19 era. Technological advancement and wide scale application can help in easy follow-up of patients specially in remote area.

Moderated Podium Session 1

POD 01 - 01
Buccal mucosal graft onlay technique for upper ureteric and UPJ strictures
Dr Shashank Patil, Dr Vikram Prabha, Dr RB Nerli, Dr Shridhar C Ghagane
K L E Medical college, Belgaum

Introduction: A proximal ureteral and ureteropelvic junction stricture is characterized by a narrowing that causes a functional obstruction to the flow of urine. This leads to stasis, pain, urinary infections and eventually renal failure. Onlay repair using buccal mucosal grafts have been reported. In this paper we report our experience in the use of buccal mucosal grafts in the reconstruction of difficult upper ureteric and uretero-pelvic junction strictures.

Materials & Methods: We retrospectively looked at our hospital inpatient and outpatient records of all patients who underwent surgical treatment for benign upper ureteric strictures and ureteropelvic junction strictures.

Results: During the study period a total of 22 patients with a mean age of 32±6.07 years underwent buccal mucosal graft repair. The mean length of the narrowing/stricture was 6.40± 1.44 cms.

Conclusion: Buccal mucosal onlay graft ureteroplasty is a suitable treatment option for long, complicated benign upper ureteric and select ureteropelvic junction strictures. It is technically simple and capable of providing optimum patency of ureter with good urinary drainage. It is safe and effective.

POD 01 - 02
Functional outcomes after pyeloplasty in solitary kidneys
Dr Rinaldo M, Dr Trivedi S, Dr Kumar L, Dr Singh Y
Introduction: Renal function recoverability after pyeloplasty is affected by the hyperfiltration phenomenon in PUJO, which may have a fundamental role in progression to irreversible renal damage. The objective of the study is to assess the long-term functional outcomes after pyeloplasty in solitary kidney (SK) and to define factors affecting postoperative renal function recoverability in adults.

Methods: We retrospectively evaluated all adult patients who underwent pyeloplasty for pelvic-ureteric junction obstruction (PUJO) in SK from 2011 to 2018. Long-term renal function was assessed by radionuclide scans and morphological changes were also determined, e.g. renal parenchymal volume (RPV) and parenchymal thickness (PT). We considered a >20% increase in glomerular filtration rate (GFR) as improvement, >20% decrease as deterioration, and changes within 20% as stationary renal function.

Results: The study included 82 patients with a mean age of 29 years. At a median follow-up of 48 months, the mean GFR increased from 41.3 to 48.5 mL/min (P < 0.001), with a significant increase in RPV and PT (P = 0.02 and P = 0.001, respectively). Follow-up renal function was static, improved and decreased in 39 (63.4%), 17 (27%) and 6 (9.6%) patients, respectively. Patient’s age ≥39 years, PT ≤0.75 cm and higher early postoperative AKIN staging were predictors associated with a deterioration in renal function.

Conclusion: Pyeloplasty in SK preserved renal function in most of the patients. Pyeloplasty in SK when associated with older age, decreased PT preoperatively, and early higher AKIN staging postoperatively was associated with poor renal function recoverability.

POD 01 - 03
Robotic VVF repair: Lessons Learnt
Dr Rohit Kaushal, Dr Samit Chaturvedi, Dr Ruchir Maheshwari, Dr Pragnesh Desai, Dr Amit Bansal, Dr Rajiv Kumar, Dr Anant Kumar
Max Hospital, New Delhi

Introduction: VVF is a debilitating condition with a large social stigma. Multiple treatment approaches are available however recurrence rates are high owing to multiple factors. Multiple treatment approaches are currently practiced worldwide. Robotic system offers a minimally invasive approach with excellent 3D vision. We present our experience and lessons learnt which helped us achieve better outcomes with decreased recurrence rates.

Materials and methods: Total of 15 cases of VVF were operated by a single surgeon on Robotic dA Vinci (Xi) system from 2016-2020. 4 of 15 cases were complex VVF. Most cases were post hysterectomy while a minority were due to other etiologies. Modified O’Conor technique was used in all cases. Omental or peritoneal flap interposition was done depending on the availability. We performed technical modifications specifically for robotic approach aimed to achieve better outcomes.

Results: All patients had an uneventful recovery with a smooth convalescence. No major intraoperative or post op complications occurred. Drain was removed on POD 2-3 in most patients. Perurethral catheter was removed after 2 weeks after documenting no leak on cystogram. In 2 patients catheter was removed after 3 weeks in view of minor leak on cystogram. 3 patients had significant pericatheter leak which was managed with dual anticholinergics. None had recurrence at 1,3 & 6 month follow up.

Conclusion: Robotic VVF repair offers a minimally invasive platform with an excellent 3D vision and tremor free sutting which translates into improved outcomes and decreased recurrence rates compared to other approaches.

POD 01 - 04
Exstrophy Epispadias Complex: Outcome and Analysis of Repair Performed at a tertiary care centre
Dr Mukesh C Arya, Dr Ankur Singhal, Dr Ajay Gandhi, Dr Yogendra Shyoran, Dr Ramnaresh Daga
SNMC Bikaner

Objective: The exstrophy epispadias complex (EEC) is a rare developmental defect with an incidence of 4.7/100000 involving multiple systems including the genitourinary system.

We share our outcome analysis of 38 surgeries performed on 27 EEC cases at our institution.

Material and Methods: This is a retrospective analysis of the outcome and follow up of patients operated for EEC. A total of 31 cases including 17 bladder exstrophy (12 Males, 5 Females) and 21 epispadias (15 Males, 6 Females) were treated from September 2014 to November 2020. Total 38 surgeries were performed on 27 patients which included 7 male cases of closed exstrophy who underwent subsequent epispadias repair. These included two interesting exstrophy cases also. Epispadias group also included two adult males.

Result: Thirteen pediatric patients underwent primary bladder and abdominal closure. Bladder reclosure rate was 14.2%. One adult male underwent Mitrofanoff diversion. The other adult- 19-year female had bladder closure, followed by bladder augmentation and rectus flap interposition. Male epispadias repair was performed in 14 patients (7 post closed exstrophy and 7 epispadias). Fistula rate after male epispadias repair was 15.3%. Five females underwent repair for epispadias. Bladder neck reconstruction (BNR) was carried out in 6 patients. Continent rates post BNR was 83% (including social continence).

Conclusion: This congenital anomaly requires accomplishment of meticulous repair in a staged manner. These cases need follow up from birth to adulthood. Presentation at adult age is extremely rare and related to social stigma, illiteracy and poor access to health care system.
Surgical Management for Disorders of Sexual Development - A Three decades experience from a Single tertiary care center
Dr Madhur Anand, Dr Anupam Shukla, Dr Abhishek Pathak, Dr Shitangsu Kakoti, Dr Priyank Yadav, Dr Mohd S Ansari
SGPGI Lucknow

Introduction: Disorder of sexual development (DSD) is major cause of psychosocial anxiety to patients and parents. We have reviewed various types of DSDs and the outcomes of masculinizing and feminizing genitoplasty and present our experience of here.

Material and Methods: We retrospectively reviewed clinical records of all patients with DSDs managed surgically at our institute between January 1990 to December 2019. Patient details and surgical procedures analyzed and results assessed in terms of cosmetic, functional, psychosocial, and sexual outcomes. DSDs were classified using the system proposed by Grumbach and Conte (before 2005) and Chicago consensus (after 2005).

Results: Total 134 patients were retrospectively analyzed. The age at diagnosis ranged from newborn to 32 years. Most common ethology was 46 XX DSD. Masculinizing and feminizing genitoplasty done according to the gender of rearing, genital anatomy, and parental choice. Among 68 patients diagnosed as 46 XX DSD, 54 patients (87%) reported satisfactory cosmetic and 48 patients (77%) had satisfactory functional outcomes and 58 patients (85%) had good psychological outcomes in long term. Among 55 patients diagnosed as 46 XY DSD, 31 (89%) patients reported satisfactory cosmetic outcomes and 27 (75%) reported satisfactory functional outcomes and 31(87%) had satisfactory psychological outcomes. In sex chromosome DSD (mixed gonadal dysgenesis) satisfactory cosmetic, functional, and psychological outcome was seen in 85%, 74%, and 89% respectively.

Conclusion: Managing disorder of sexual development according to the gender of rearing, genital anatomy, and parental choice carries a good prognosis regarding cosmetic, functional, psychosocial, and sexual outcomes.

Robot assisted urinary bladder and ureteric reconstructive surgeries for benign diseases: Single centre experience
Dr Nikita Shrivastava, Dr Pritesh Jain, Dr Gautam Ram Choudhary, Dr Vijay Kumar Sarma Madduri, Dr Himanshu Pandey, Dr Mahendra Singh, Dr A S Sandhu
AIIMS, Jodhpur

Objective: To present our initial experience with robot assisted reconstructive surgeries with Xi system for benign ureteric and urinary bladder pathologies.

Materials and methods: We retrospectively reviewed the prospectively kept data of the patients who underwent robot assisted reconstructive procedure for benign diseases of ureter and bladder at our department from April 2018 to February 2020. Perioperative data such as age, sex, body mass index (BMI), American society of anaesthesiologists score (ASA), etiopathogenesis, estimated blood loss (EBL), surgical technique, operative time, complications, length of hospital stay, and stent removal time were recorded. During the follow-up, patients underwent renal function test, urinalysis, ultrasound and relevant examination for evaluation. Surgical success was evaluated on the basis of symptomatic and radiological improvement.

Results: Twenty six patients (15 male and 11 female) underwent various methods of robot assisted reconstructions in the department of urology for benign ureteric and bladder pathologies. Mean age, body mass index (BMI), hospital stay and follow-up were 37 years, 24.3kg/m2, 4.6 days and 8.4 months respectively. Procedures included primary ureteroneocystostomy (UNC) in 6, Psoas hitch UNC in 5, Boari flap UNC in 6, Ureteroureterostomy in 2, ureterocalicostomy in 2, Ileal bladder augmentation in 3, and diverticulectomy in 2 patients. Mean docking time, total operative time, and estimated blood loss was 26.15 minutes, 196 minutes and 92.7 ml respectively. Surgical complications were categorised on the basis of Clavien-Dindo classification. Complications occurred in 15 patients within 6 months of surgery, all complications were minor (grade I–II). All patients had radiologic or functional improvement on follow-up after 3 months.

Conclusion: Robot assisted reconstructive surgery for benign ureteric and bladder pathologies imparted excellent short-term outcomes without major complications with the advantage of the minimally invasive technique.
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 postoperative results make it a promising option for augmentation urethroplasty.

Methods: Sixteen patients with long segment anterior urethral strictures (involving penile and/or bulbar urethra and stricture length >4 cm) were included in the study after proper informed consent was obtained. Acellular tissue engineered indigenous bovine pericardial patch was used for urethroplasty using dorsal on-lay technique.

Results: A total of sixteen patients underwent tissue engineered indigenous pericardial patch urethroplasty for long segment urethral strictures, mostly catheter injury induced or associated with balanitis xerotica obliterans. Median follow-up was 10 months (range: 4-16 months). Out of sixteen patients, 13 (81.25%) were classified as success and 3 (18.75%) was classified as failure.

Conclusion: Our study brings a product of tissue engineering, bovine pericardial patch, into the urology operating room with good outcome achieved using standard operating techniques of one stage urethroplasty.

POD 02 - 02
Complex hypospadias reconstruction: Ulaan baatar technique revisited
Dr Saurav Karmakar, Dr Asim Kumar Das, Dr Tapan Kumar Mandal, Dr Tapas Kumar Majhi, Dr Parthapratim Das, Dr Bishal Vargyab, Dr Dipankar Bera
Government Medical College, Kolkata

Introduction and Objectives: Complex hypospadias repair is a challenging issue for the urologists. Though a lot of progress in this field has been done, no surgical technique has proved to be the best. Many urologists prefer staged repair for the complex cases. In Ulaan Baatar technique a distal neourethral tube along with glans is reconstructed in first stage with formation of a controlled fistula between neourethral tube and native urethra proximally. Later in second stage the fistula is closed by traditional technique. Through this study we are sharing our clinical experience regarding management of proximal hypospadias (primary or redo) by utilizing the principle of Ulaan Baatar technique.

Materials and Methods: We reviewed the records of 11 different patients with proximal hypospadias who had undergone Ulaan Baatar repair in last 3 years. 7 patients had multiple previous attempts of hypospadias repair and 4 were primary (naïve) cases with proximal hypospadias.

Results & Discussion: Mean follow up was 18.5 months after first stage and 12.4 months after the second stage. The mean age was 14.1years (range 8 to 22 years). Mean time between stage I and stage II was 8 months. One patient developed urethral stricture in the proximal penile urethra and underwent buccal mucosal graft urethroplasty later. None of the patients developed fistula, glans dehiscence, meatal stenosis or diverticula formation. All patients had satisfactory cosmetic appearance of glans, distal meatus and shaft.

Conclusion: The Ulaan Baatar technique is very safe and effective technique with better cosmetic outcomes and least complication rates.

POD 02 - 03
Progressive perineal approaches of end-to-end anastomotic urethroplasty for pelvic fracture urethral distraction defect: An eight-year experience from a tertiary care center
Dr Ali M, Dr Manikandan R, Dr Dorairajan LN, Dr Kastra S, Dr Sreerag KS, Dr Kushwaha S S
JIPMER, Pondicherry

Introduction and Objective: Pelvic fracture urethral distraction defect (PFUDD) is a challenging problem for urologists. The published rate of urethral injury varies from 2-25% in different series. Anastomotic urethroplasty is the preferred surgical procedure for the treatment of PFUDD and its success rate is reported to be around 77%-95%. The aim of our study is to describe the success rate and complications in patients who underwent anastomotic urethroplasty along with various progressive perineal approaches for PFUDD.

Methods: This retrospective study was conducted on 49 patients with PFUDD who had undergone urethroplasty, were enrolled in this study. They were studied in terms of demography, type of pelvic fracture, length of distraction defects measured using retrograde urethrography combined with voiding cystourethrography, complications, management, and outcomes.

Results: Out of 49 end-to-end anastomotic urethroplasty procedures performed, 37 (75.5%) were successful and 12 (24.5%) were not successful. Seventeen patients underwent corporal body separation, inferior pubectomy was done in eight patients and five patients underwent crural rerouting. The mean (SD) maximum urinary flow rate, assessed by uroflowmetry after surgery, was 18.87 (5.1) mL/s. Intraoperative rectal injury was repaired primarily in 5 cases. All of these patients underwent re-operation. Four patients (8.1%) had mild incontinence. Erectile dysfunction (ED) was present in fourteen (28.57%) patients after trauma post-operatively.

Conclusions: PFUDD can be adequately managed by anastomotic urethroplasty, even in prior reconstructed or intervened cases. Careful workup and accurate dissection can help in preventing complications of urethroplasty.

POD 02 - 04
Standard Snodgrass tubularised incised-plate urethroplasty versus Mathieu technique combined with incision of the urethral plate in primary repair of distal & Mid-penile hypospadias: A Retrospective study.
Introduction: We assessed the benefits of the Mathieu with incised-plate urethroplasty (Mathieu-IP) technique in improving outcomes and cosmesis in comparison with the standard Snodgrass TIP technique.

Objective: To compare outcomes of the Standard Snodgrass tubularised incised-plate urethroplasty versus Mathieu technique with incised-plate (Mathieu-IP) urethroplasty for management of distal & Mid-penile hypospadias.

Methods: In this multicentric retrospective study of data of 30 patients (aged 1-20 years) between April 2018 and August 2020, with primary distal & Mid penile hypospadias were grouped, studied & compared to get results. Group 1 included 15 patients who underwent TIP repair and Group 2 included 15 patients managed using the Mathieu-IP repair for primary management of distal & mid-penile hypospadias. Perioperative follow up data, complications and outcomes of both procedures were statistically analysed and compared.

Results: There was no statistically significant difference in the mean operative time between Groups 1 and 2, at 98 (7.6) and 100.2 (8.1) min, respectively. There was statistically significant difference in Qmax in Group 2 postoperatively (p= 0.045).

The rate of postoperative fistula was significantly higher in Group 1 compared to Group 2, at 20% vs 0% (p= 0.035). There was no postoperative meatal stenosis in Group 2, which did occur in two patients (13.4%) in Group 1 (p = 0.076) statistically insignificant.

Conclusion: The Mathieu-IP technique appeared to be better than the standard TIP technique in context to postoperative Urinary flow rate, fistula formation and meatal stenosis, and with decent cosmetic results.

Double face buccal mucosal Graft urethroplasty for post TURP strictures
Dr Sanjeev Bafna, Dr Pankaj Joshi, Dr Vipin Sharma, Dr Shreyas Bhadranavar,
Dr Sanjay Kulkarni
Kulkarni Institute of Reconstructive surgery, Pune

Introduction and objective: between 2.2% and 9.8% of patients undergoing TURP present urethral stricture as a complication. It commonly occurs within the first 6 months. Our objective is to assess the outcomes of patients with obliteratoric strictures post-TURP that underwent a double-face urethroplasty.

Methods: single-centre prospective study of 17 patients with obliteratoric proximal bulbar stricture post-TURP who underwent double-face graft urethroplasty between 2014 and 2020. We define obliteratoric strictures as those patients after undergoing TURP present a complete or almost complete obstruction of the urethral lumen and who have had a history of acute urine retention. We exclude patients with bladder neck contracture. We included only patients with complete clinical data and follow-up. Primary outcome was treatment success, defined as the no need for further treatments. Secondary outcome was post-urethroplasty continent rate.

Results: 17 patients were included in the study with median age of 66 years (interquartile range 40-77); median time of follow up was 24 months (interquartile range 12-84); median stricture length was 4 cm (interquartile range 2-6) Of the 17 patients, 15 were successful (88.2%). All patients were continent after urethroplasty.

Conclusion: with mid-term follow-up, treatment of obliteratoric proximal bulbar strictures with double-face buccal mucosa graft is a safe and effective procedure with high-rate success and functional outcomes.

Surgical outcomes in Secondary Hypospadias patients in a tertiary care Centre - Over a decade experience
Dr Ankur Singhal, Dr Mukesh Chandra Arya, Dr Ajay Gandhi, Dr Yogendra Shyoran, Dr Rakesh Singh, Dr Pranjal Moharjal
SPMC, Bikaner

Introduction: Hypospadias is a common (1 in 250) congenital challenging surgery in urology. Herein, we present patient’s perspective and their outcomes in 268 primary hypospadias in one-stage.

Materials and Methods: From January 2010 – December 2019, 377 patients were studied and their outcomes were documented. Patients with prior hypospadias with complications (n=48), chordee without hypospadias (n=16), isolated penile torsion (n=12) and 33 patients who were lost to follow up were excluded from this study to evaluate only primary hypospadias cases (n=268).

Results & Discussion: Age varied from 6 months to 32 Years (Mean – 10.9 years). After orthoplasty, most common type was distal hypospadias 59% (n=158), middle in 22.8 % (n=61) & proximal hypospadias in 13.1% (n=35) patients. Also 5.2% (n=14) patients had penoscrotal transposition. Chordee was present in 71.2% (n=192) cases. (<30o in 44.8%, n=120, 30-60 in 22%, n=59, and >60° in 4.9%, n=13). Chordee was corrected using midline dorsal plication and ventral corporotomy. Urethral closure was done using TIP alone in 18 cases, TIP and spongioplasty (n=233) and three patients had inner preputial Onlay flap urethroplasty (koyanagi/ inner prepuce tube). The urethral plate was augmented by Snodgrass in 12 cases. The success rate of one-stage surgery was 73.5% in our series which correlated with PRO’s with high significance.
Conclusion: Hypospadias fistula is the most common complication of hypospadias surgery followed by glanular dehiscence in our series. Patients can have acceptable residual chordee and torsion and their surgical results correlate well with PRO.

POD 03 - 01
Assessment of health-related quality of life in patients with carcinoma prostate following bilateral orchidectomy using FACT-P questionnaire
Dr Rohit R Hegde, Dr Monohar C S, Dr Shivalingaiah M, Dr Nagabhushan M, Dr Navaneeth S, Dr Pramod A, Dr Keshavamurthy Ramaiyah
Institute of Nephro-Urology, Bangalore

Introduction: Though one of the most commonly practiced modality of androgen deprivation therapy, studies assessing the quality of life in patients following bilateral orchidectomy are limited. In this study we have utilized the FACT-P questionnaire in patients who have undergone orchidectomy to assess their quality of life.

Objective: To provide an effectiveness analysis of the quality of life of patients of carcinoma prostate treated with bilateral orchiectomy.

Patients And Methods: Men (n=68) diagnosed with prostate cancer in the period from January 2017 to December 2019 who underwent bilateral orchidectomy were studied. Demographic data was collected. Patients were interviewed personally on follow-up. The QoL was evaluated prospectively by the FACT-P questionnaire.

Scoring and analysis guidelines given by the Facit.org was used to analyze the FACT-P Questionnaire.

Results: Total 68 patients were studied of which 40 patients were locally advanced disease and 28 patients were having metastatic disease. Mean age was 64 years. Most of the patient belonged to lower socioeconomic class. The mean postop PSA value 1.93(ng/ml). Common Gleason score was 4+4 Mean physical well being score was 25.8(28), prostate cancer subscale score was 35.8(48), mean total FACT-P score was 132.3(156). The sense of considering cancer free after treatment was more in orchidectomy patients.

Conclusion: &e Orchiectomy in patients as a mode of androgen deprivation have good quality of life both in terms of physical and emotional aspects with minimum side effects and can safely administered in low socioeconomic group where finance is the major concern for other non surgical modalities.

POD 03 - 02
Perioperative outcome in partial nephrectomy in different surgical modalities- A Retrospective single center cohort study
Dr Deka Hiranya, Dr P Ginil Kumar
Amrita Institute of Medical Sciences, Kochi

Introduction and Objective: This is a retrospective study to evaluate the perioperative outcome in partial nephrectomy across different surgical modalities in terms of trifecta and pentafecta achievement in a single institution cohort.

Method: Patients are divided according to low, intermediate and high renal score group and their perioperative outcome are calculated across the three surgical modalities.

Results: We have 183 patients cohort, with open 53, lap 23 and robotic 107. In low RENAL Score group, trifecta is achieved in 93.8% open, 100% lap and 94.7% robotic whereas pentafecta is achieved in 93.8% open, 100% lap & 92.1% robotic with no statistically significant difference. In intermediate RENAL Score group, trifecta is achieved in 88.9% open, 20% lap & 53.2% robotic with p value 0.001 whereas pentafecta is achieved in 74.1% open, 20% lap & 53.2% robotic with p value 0.005. In high RENAL Score group, trifecta is achieved in 50% open, 0 lap & 0 robotic PN with p value of 0.001 whereas pentafecta is achieved in 30% open, 0% lap & 0% robotic PN with p value of 0.001. Mean blood loss are 363, 160, 180 ml and mean hospital stay are 7.9, 6.5, 6 days respectively.

Conclusion: The trifecta and pentafecta outcome has no statistically significant difference across the three modalities in low RS group, while in intermediate and high RS group open surgery has statistically significant higher trifecta and pentafecta achievement with higher blood loss and hospital stay.

POD 03 - 03
Predicting factors for development of renal insufficiency following partial nephrectomy
Dr Hari Shankar Singh, Dr Sandeep Kumar, Dr Rohit Kumar Namdev, Dr K Sridhar Reddy, Dr Sameer Trivedi, Dr Yashasvi Singh
IMS, BHU, Varanasi

Introduction: Partial nephrectomy (PN) is the standardized surgical treatment for T1a and some T1b renal tumors due to the lack of cancer-specific survival benefit with radical nephrectomy, superior renal function outcomes, potential cardiovascular and overall survival benefits and avoiding chronic kidney disease (CKD). The primary aim of study is to develop predictors of renal insufficiency and subsequent renal function recovery following PN.

Material and methods: Total 69 patients who underwent PN for T1a and T1b were included and retrospectively analysed. Patients with distant metastases, lymphadenopathy, or venous tumor thrombus on imaging; and CKD 5 were excluded. Patients were seen in the clinic at 3, 6, 12, 18, 24, and 36 months then annually, with renal function assessment, eGFR estimation and cross-sectional imaging.
Associations with early postoperative renal failure within 30 d of surgery were evaluated using univariable logistic regression models. Multivariable models were developed using backward selection of the preoperative features under study and their two-way interactions with time and p value <0.05 was considered statistically significant.

Results: Mean preoperative eGFRs was 66 ml/min/1.73 m². The predicting factors for renal insufficiency after PN included age, presence of a solitary kidney, diabetes, hypertension, preoperative eGFR, preoperative proteinuria. The strongest individual predictor of long-term renal function in post surgery was preoperative eGFR.

Conclusion: Patients with higher age, solitary kidney, diabetes, hypertension, low preoperative eGFR, preoperative high proteinuria are at high risk of post op renal insufficiency. This should help clinicians during patient counselling and decision-making in the management of kidney tumors.

POD 03 - 04
Role of multiparametric magnetic resonance imaging (MRI) and VI-Rads (vesical imaging -reporting and data system) score in assessment of t stage of bladder tumours
Dr Surajit Hazarika, Dr Shah S, Dr Bajaniya S, Dr Shah N, Dr Narnoli S, Dr Patel K, Dr Singh A
BJ Medical College, Asarwa

Introduction and Objective: Urinary bladder cancer accounts for about two-thirds of all urinary cancers. The Vesical Imaging-Reporting and Data System (VI-RADS) scoring system was created in 2018 to standardize imaging and reporting of bladder cancer staging with multiparametric MRI. The system provides a five-point VI-RADS score, which suggests the likelihood of detrusor muscle invasion.

Here we are trying to determine the accuracy of pre-operative multiparametric MRI VI-RADS scoring in detecting muscle invasiveness of bladder cancers.

Methods: We performed preoperative MP-MRI with VI-RADS score in 35 patients and all patients underwent TURBT. The VI-RADS scores were compared with the T stage of the histopathological examination of the resected tumours.

Results: No patients had VIRADS 1 lesion, 9 (25.71%) patients had VIRADS 2 lesion, 18 (51.42%) patients had VIRADS 3 lesion out of which 15 patients had T1 tumour and 3 patients had Ta tumour, 3(8.5%) patients had VIRADS 4 lesion out of which 1 patient had T1 tumour and 2 patient had T2 tumour, 5(14.28%) patients had VIRADS 5 lesion all of which had T2 tumour on TURBT specimen. The sensitivity, specificity, Positive predictive value, Negative predictive value of Multiparametric MRI VI-RADS scoring in detecting muscle invasiveness were 100%, 96.42%, 87.5%, 100% respectively, if VIRADS score >3 is taken into consideration.

Conclusions: VI-RADS scoring on multiparametric MRI gives us accurately the objective value to determine bladder tumour muscle invasion level with good sensitivity and specificity particularly in patients with VIRADS score 4 and above.

POD 03 - 05
Which dose schedule of sunitinib for first line treatment of clear cell metastatic renal cancer is better for Indian patients - 2/1 or 4/2?
Dr Jiten Jaipuria, Dr SK Rawal, Dr A Singh, Dr G Sharma
Rajiv Gandhi Cancer Institute and Research Centre, Delhi

Introduction and objective: Sunitinib is the first-line treatment for favorable risk metastatic clear cell renal cell cancer (mccRCC). It was historically given as 4/2 regimen, however, toxicity necessitated trying alternative schedules. Geographic variations in treatment efficacy and toxicity exist and there is no data from the Indian subcontinent about outcomes of the 2/1 dose regimen.

Methods: We included all consecutive adult patients who received sunitinib as first-line therapy for histologically proven mccRCC following cytoreductive nephrectomy from 2010-2018. Progression-free survival (PFS) was the primary objective; secondary objectives were response rate, toxicity, and overall survival. A list of variables having plausible association with principal outcome was made and multivariate inverse probability treatment weights (IPTW) analysis was done to determine the absolute effect size of dosing regimens on PFS in terms of average potential outcome mean and average treatment effect on the treated.

Results: 2/1 schedule was found independently associated with higher PFS on IPTW analysis. We estimated that if every patient in the subpopulation received sunitinib by the 2/1 schedule, the average time to progression would be higher by 6.1 months in comparison to the 4/2 schedule. We also found the 2/1 group to have a lower incidence of nearly all ≥grade 3 toxic effects. Both treatment groups were comparable in terms of other secondary outcomes.

Conclusions: Sunitinib should preferably be given via the 2/1 schedule for Indian patients.
Introduction & Objective: The purpose of this study is to compare the safety and efficacy of En bloc resection of bladder tumor (EBRT) and conventional transurethral resection of bladder tumor (TURBT).

Methods: We performed a prospective study between September 2020 to May 2021 to compare safety & efficacy between EBRT & TURBT by conventional monopolar electrodes. In both groups 25 cases were taken. We compared the operation time (OT), hospital time (HT), catheterisation time (CT), peri-operative period complications, bladder Detrusor muscle found or not in specimen & residual tumor on base.

Results: Both groups were comparable in clinic-pathological criteria. There were no significant difference in Operation time & surgical complications. The Detrusor muscle could be identified pathologically in all EBRT specimen & biopsies of tumor bases but only in 55% & 71% respectively of TURBT samples (p<0.01).

Conclusion: The EBRT technique is safe and feasible for superficial bladder tumor using conventional monopolar resection with advantage of adequate tumor resection & ability to collect good quality tumor specimen for pathological diagnosis and staging compared to conventional TURBT.

POD 04 - 01
Can cross-sectional imaging stratify patients to lymph node staging procedures in penile cancer?
Dr Patel Amit, Dr Boaz RJ, Dr Kumar V
Surat

Introduction: Twin standards of care for non-palpable nodes in penile cancer are Dynamic Sentinel Node Biopsy (DSNB) and Inguinal Lymph Node Dissection (ILND). While DSNB has a 5-13% false negative rate (FNR), ILND which is highly specific carries added morbidity. Imaging may assist in stratifying patients to either procedure.

Materials and methods: 158 consecutive patients with 316 Inguinal basins (IB) were studied between 2008 and 2018. Ultrasound (US) +/- Fine Needle Aspiration Cytology (FNAC) was followed by CT/MRI. The combined outcomes were used to stratify patients to either DSNB or ILND.

Results: Out of the 316 IBs, 241 were clinically node negative (cN0) and underwent DSNB. 71 IBs were cN+ and had ILND. 27(11.2%) of DSNBs and 39(54.9%) of ILNDs had metastasis. The minimum and mean follow up was 28 and 65 months respectively. The FNR was 0%.

Among 108 pts of DSNB, 30 had MRI, 35 had CT. 43 with negative US had no further imaging. Positivity rate was 2/43(4.7%) for non-imaged and 14/65(21.5%) for imaged. 11 IBs of 9 patients with negative US had cN+ on imaging, underwent ILND. 3 IBs in 3 patients proved positive. Without imaging these would be false negative.

Cancer Specific survival (CSS) for pN+ was similar between groups (89 vs 92 months: p 0.124).

Conclusion: Imaging proved valuable in reducing FNR of DSNB. Following stratification, CSS following DSNB and ILND in pN+ was comparable. This study is the first to report CSS in LN staging of penile cancer.

POD 04 - 02
Histological variations in renal tumors in Tamil Nadu
Dr Ankitkumar Sharma, Dr Kuppurajan Narayanasamy, Dr Devdas M, Dr PB Barani Kumar, Dr M Anandan
Koval Medical Centre, Coimbatore

Introduction: Renal masses are a common presentation in the urology clinic. The incidence of renal tumours is increasing at almost 3% per year which is probably related to the easier availability of diagnostic modalities in the community.

Renal cell carcinoma, which accounts for 2% to 3% of all adult malignant neoplasms, is the most lethal of the common urologic cancers. Overall, approximately 16 new cases are diagnosed per 100,000 population per year, with a male-to-female predominance of 1.9 to 1. This is primarily a disease of older adults, with typical presentation between the sixth and seventh decades of life. The majority of cases of RCC are sporadic; only 4% to 6% are believed to be familial.

The most generally accepted environmental risk factor for RCC is tobacco exposure. Obesity is now accepted as another major risk factor for RCC, with an increased relative risk of 1.07 for each additional unit of body mass index. Hypertension appears to be the third major causative factor for RCC. Although a number of other potential causative factors have been identified in animal models, including viruses, lead compounds, and more than 100 chemicals such as aromatic hydrocarbons, no specific agent has been definitively established as causative in human RCC.

The most common histological subtype is Clear cell RCC which accounts for about 70-80% of malignant renal tumours, followed by papillary RCC which accounts for 10-15%. Other renal tumours like chromophobe RCC account for about 5% of renal tumours. Rare varieties account for the remainder of the 5% of renal tumours including clear cell papillary RCC, collecting duct carcinoma, SDH deficient RCC.
Aims and objectives: Although there is no paucity of data on the histology of renal tumours in the Indian subcontinent, the studies are limited by the number of cases incorporated; furthermore, the histological spectrum has not been studied in Tamil Nadu. To address these lacunae in literature we undertook a study with the aim to define the histological spectrum of renal tumours encountered in urological practice in our tertiary care institution over the last 10 years.

Methods: All patients undergoing partial or radical nephrectomy for renal tumours were included in the study population. Demographic data, symptoms at presentation, comorbid illnesses and histopathological data was recorded and tabulated. Patients undergoing nephro-ureterectomy for ureteric/ renal sinus tumours with previously documented transitional cell carcinoma were excluded from the study population. Patients with incomplete data were also excluded from the study population.

Results: A total of 239 radical nephrectomies were performed in the study period in our institute. Out of these 22 patients' data was incomplete or missing. 217 patients were included in our study population, comprising of 165 males (73%) and 52 (27%) females. The male to female ratio was 3.17:1. 121 nephrectomies were performed on the left side with 93 being performed on the right side and 3 were bilateral.

The mean age of the study population was 54.7 years with 64.97 % (n=141) patients being younger than 60 years of age. This finding is in contrast to the majority of epidemiological data available from the subcontinent including the southern states.

The most common stage at presentation was pT1 accounting for 48.38% of patients (n=105). The increasing availability of radiological investigations might be responsible for this shift in presentation, as we noticed a changing trend over the terminal parts of study period. Indeed 45% of patients presented with incidental finding of renal masses. Loin or abdominal pain was the most common symptomatic presentation accounting for 36% of patients.

The most common histological pattern was clear cell renal carcinoma (n=160, 73.73%), with papillary carcinoma being the second (n=22, 10.04%). The unanticipated result was the finding of 7.37% of tumours of rare variety in contrast to literature.

Conclusion: Renal tumours are a common presentation in urological practice in Tamil Nadu. The majority of tumours now present as incidental findings. There is a shift in the age of presentation with more patients presenting in the younger age group (<60 years).

The most common histological variant remains Clear cell RCC but there is a higher incidence of rare histological variants in comparison to the global literature.

POD 04 - 03
To evaluate the diagnostic yield of PSMA PET in patients of suspected carcinoma prostate with negative TRUS guided biopsy
Dr Choube A, Dr Kumar S, Dr Sharma AP, Dr Singh SK, Dr Kumar R, Dr Parmar KM
Jabalpur

Introduction and objective: The rate of false negative results for Transrectal Ultrasound guided prostate (TRUS-GB) biopsy for suspected carcinoma prostate (CaP) may be as high as 35% depending on used techniques. Those patients with negative TRUS-GB undergo repeat biopsy or MRI guided biopsy. At our centre we are doing PSMA-PET guided biopsies for these patients and this study was designed to determine the diagnostic yield of PSMA-PET and PSMA-PET guided biopsy in patients with negative TRUS-GB.

Methods: Those cases with high clinical suspicion of CaP with a benign histopathology report after TRUS-GB, were evaluated by 68Ga-PSMA scan to localise the avid lesion and PSMA-PET guided biopsy was done.

Results: 43/113 patients which were negative on TRUS-GB showing PSMA avid lesion were included. 90.7% (N=39) were detected as CaP which were undetected by TRUS-GB, 3 showed hyperplasia, 1 case was acute prostatitis similar to TRUS-GB, 3 showed hyperplasia, 1 case was acute prostatitis similar to TRUS-GB on PSMA-PET. The sensitivity, specificity and diagnostic yield of PSMA PET scan was 84.62%, 75% and 97.06% respectively at an SUVmax >6.95 on 68Ga-PSMA scan. 85.7% of anteriorly located lesions which was missed on TRUS GB were accurately targeted and diagnosed by PSMA PET TB. 86.7% of cases with PIRADS score >3 and SUVmax > 6.95 were diagnosed as CaP by PSMA PET guided biopsy in cases negative on TRUS-GB. Overall complications were lower in PSMA-PET compared to TRUS-GB.

Conclusion: Diagnostic yield of PSMA PET GB remain high in patients having initial negative TRUS-GB.

POD 04 - 04
A study to assess preoperative lymphocyte to monocyte ratio, plasma fibrinogen and weight of resected specimen after transurethral resection of bladder tumour as a predictor of recurrence and prognosis in non-muscle invasive bladder cancer
Dr Anand Biyani, Dr Ranjan Dey, Dr S Basu
RG Kar Medical College, Kolkata
Introduction: Non-muscle invasive bladder cancer (NMIBC) carries a high risk of recurrence & progression to muscle invasive bladder cancer (MIBC). Various parameters of inflammation like lymphocyte-to-monocyte ratio (LMR), plasma fibrinogen level and tumour weight serve as independent factors in determining recurrence and prognosis. The purpose of our study was to find the significance of these factors and develop a correlation between the same.

Objectives
1. To assess the significance of these parameters as a predictor of recurrence & prognosis in NMIBC
2. To investigate and validate the predictive value of combination of these parameters.

Methods: A prospective observational study wherein 63 patients with bladder tumour were included. Their lymphocyte and monocyte count ratio (LMR), plasma fibrinogen level were measured 7 days before surgery. After TURBT, specimen was weighed using high precision weighing device. Diagnosis confirmed by histology and those with MIBC were excluded. Patients were followed for 1 yr for prognosis and recurrence.

Results: An elevated preoperative LMR was associated with better prognosis and reduced recurrence. Receiver operating curve (ROC) showed its cut off value as 3.46. The cut off value for plasma fibrinogen and tumour weight was 3.56, 4 gm. Kaplan-Meyer analysis demonstrated that higher fibrinogen level and tumour weight was associated with poor prognosis and increased recurrence. Multivariate analysis used to assess significance of combination of these three factors. Calibration plots and decision curve analysis exhibited that combination has good accuracy.

Conclusion: A combination of these three parameters can prove an important prognostic predictor in NMIBC for recurrence.

POD 04 - 05

Incidence of renal tumours in non-functioning kidney secondary to renal calculus disease.
Dr Ram Prasad Ch, Dr V Rajagopal, Dr Sharma DVSLN, Dr Daxay Lakhani, Dr Sirish Bharadwaj, Dr Rajesh Apollo Hospital, Hyderabad

Introduction: Nephrectomy for non functioning kidney secondary to calculus disease is one of the commonly performed procedure in urology. Tumors were reported in pathological specimens which were not reported in imaging preoperatively due to various factors like poor vascularity of non functioning parenchyma and poor contrast excretion into pelvicalyceal system. Non functioning kidney is defined as kidney with paper thin rim of parenchyma on ultrasound or CT scan and split renal function of less than 10%.

Objectives: To report tumors in nephrectomy specimens of non functioning kidney secondary to renal calculus which were not diagnosed preoperatively.

Material and Methods: It is a retrospective observational study done between June, 2017 to May, 2020. A total of 17 patients were included in the study. Of these 10 patients were male and 7 patients were female. Mean age of study group was 47.8 Â± 19.05 yrs.

Results: 14 specimens were reported to have chronic pyelonephritis, 2 specimens were reported to have high grade urothelial malignancy and 1 specimen reported to have oncocytoma with chronic pyelonephritis. Two of the three patients with reported tumors had history of PCNL and 1 had history of pyelolithotomy. All the three patients had difficult dissection intra operatively and had conversion from laparoscopy to open procedure.

Conclusion: Non functioning kidneys with renal stone should be managed with high index of suspicion as possible malignancy due to higher incidence of malignancies than in normal population.

POD 04 - 06

To determine correlation between VIRADS scoring and pathological staging in bladder cancer: A pilot study
Dr Shakti Swarup Sarangi, Dr Mahendra Singh, Dr Prateek Gupta, Dr Gautam Ram Choudhary, Dr Himanshu Pandey, Dr AS Sandhu, Dr Vijay Kumar Sarma Madduri
AIIMS, Jodhpur

The development of standardized reporting systems is of paramount importance in medical-imaging. Based on the ‘RADS’ methodology, PI-RADS and BI-RADS have been successfully used. The management of bladder cancer (BC) depends on the stage at the time of identification. Accurate assessment of the muscle-invasive stage can alter therapies that are radically different. MRI can accurately diagnose this in a standardized manner (Vesical Imaging Reporting and Data System:VI-RADS) and spare additional procedures. The aim of the study is to determine diagnostic accuracy of VI-RADS scoring in evaluation of muscle invasiveness in patients with BC.

This study is being conducted in the department of urology, AIIMS/Jodhpur as a prospective study starting from April, 2020. This is an interim analysis of 35 patients with bladder SOL/diagnosed BC (without evidence of muscle-invasion). Final VIRADS scoring was calculated and compared with histopathological report.

Total 35 patients were evaluated including 31 males and 4 females. Five cases (14.28 %) were reported as VIRADS-II, 3 cases (8.57 %) VIRADS-III, 12 cases (34.28 %) VIRADS-IV and 13 cases as VIRADS-V (37.14%). VIRADS-III was taken as cut off and found to have a sensitivity of 88.46%, a specificity of 77.7%, a PPV of 92% and a NPV of 70%. In our study, 5.7% of cases had outcomes other than BC (misdiagnosed). A total of 8.57% cases had falsely lower staging.
Though number of cases are still less to accurately predict test characteristics of VIRADS, our results are consistent with previously done retrospective studies and VIRADS has got good correlation with pathological staging.

POD 05 – 01
A better uroflowmetric predictor to indicate bladder outlet obstruction
Dr Anandh Balaji R, Dr Prakash JVS, Dr PV Thiruvarul, Dr Arunkumar Paranjothi,
Dr Vetrichandar S, Dr Arasi KV, Dr Natarajan V
Stanley Medical College, Chennai

Introduction And Objective: Lower urinary tract symptoms can be divided into storage, voiding and post-micturition symptoms.
Our objective is to find out better index from UROFLOWMETRIC parameters to indicate obstructive / voiding causes like Benign Prostatic Hypertrophy(BPH) and STRICTURE URETHRA in LUTS patients.
Methods: We have collected UFM data of around 150 patients with LUTS. For our study we have selected FOUR parameters from UFM to formulate an index to predict obstructive causes, BPH and STRICTURE URETHRA from other causes of LUTS .
1)Qmax- Peak Flow Rate
2)AFR- Average Flow Rate
3) PVR- Post voidal residual volume
4) VV- Voided volume

Novel UFM index = AFR/Qmax + PVR / VV

for our study we have used cut off at 0.6.

Patients with LUTS having Index > 0.6 have more chance of obstructive causes like BPH and STRICTURE URETHRA.

Results: Results of our study showed AFR/Qmax+ PVR/VV is better index in predicting obstructive causes of LUTS like BPH and STRICTURE URETHRA ( when compared with Qmax alone ) when sensitivity, specificity and diagnostic accuracy are taken into account.

Conclusion: As UFM is routinely used for patients with LUTS to predict BPH and stricture urethra, we hereby present a better novel index derived from UFM to predict obstructive causes in these patients

POD 05 – 02
Comparison of clinicopathological outcome of en-bloc resection versus conventional transurethral resection of non-muscle invasive bladder tumor
Dr Dey Sumantra, Dr Patawari P K, Dr Sharma P K, Dr Mandal S N
National Medical College & Hospital, Kolkata

Introduction And Objective: Trans-urethral resection of bladder tumor (TURBT), the gold standard treatment for non-muscle invasive bladder tumors, involves piecemeal resection of the tumor, which is contrary to the established oncological principles of removing tumor in other parts of the body. The aim of this study is to determine technical feasibility of en-block resection of bladder tumor (ERBT) and compare early recurrence between the two groups.

Methods: The study was conducted in the Urology Department between April 2020 and March 2021. Patients with first diagnosis or primary recurrence of non-muscle invasive bladder tumors with single tumor or multiple tumors < 4 in number and size <= 3 cm were allotted in 1:1 ratio to TURBT and ERBT groups. Forty-two patients were eligible, 21 in each group.

Results: The mean resection time for ERBT was 34 minutes compared to 28 minutes for TURBT. Specimen retrieval time was longer for ERBT (14 minutes versus 5 minutes). Conversion of ERBT to TURBT was seen in 6 cases (28.6%). Presence of detrusor in specimen was seen in 20 out of 21 cases of TURBT (95.2%) and 17 out of 21 (80.9%) cases of ERBT. There were no recurrences in both groups at 3 months. However, 2 cases from TURBT and one from ERBT pool had recurrent tumor at 6 months.

Conclusion: ERBT is a safe endoscopic procedure with comparable peri-operative complications, with occasional difficulty in large specimen retrieval. There was no difference in early recurrence rate among the two groups

POD 05 – 03
HoLEP for large prostate glands (more than 100 grams): Technical modifications for reducing complications and improving continence
Dr Samit Chaturvedi, Dr Maheshwari Ruchir, Dr Amit Bansal, Dr Pragnesh Desai, Dr Rohit Kaushal, Dr Anant Kumar
Max Hospital, New Delhi

Aims and objectives: The surgical procedure of choice for treating large benign prostate glands has traditionally been open prostatectomy. For last few years, Holmium laser enucleation has been increasingly used for surgical removal of large prostates. It is associated with complications like bleeding, capsular perforation, post-operative
urinary incontinence etc. can be distressing. We present technical modifications to reduce complications and improve continence.

Methods: Total 36 cases of large benign prostate glands (between 100-175 cc), who underwent HoLEP were included between January 2020 to January 2021 at our institute. We used combined Gilling / Omega technique for bi-lobar or tri-lobar enucleation of prostate. All the patients were evaluated for pre-operative assessment, intra-operative and post-operative complications.

Results: All patients showed significant improvement in symptoms and IPSS scores. Median operative time was 132 minutes. Median reduction in hemoglobin was 0.9 mg/dl. One patient had superficial bladder injury during morcellation and one required conversion to open due to small bladder neck. De novo Urge incontinence after 6 months was in 3 patients. Post-operative stress incontinence at 6 months in 2 patients.

Conclusion: HoLEP is safe and effective treatment modality for large prostate glands. Our technical modifications help reducing complications and improving continence.

POD 05 – 04
Dr Maheshwari PN, Dr Wangikar P, Dr Panda M, Dr Hegde R
Fortis Hospital Mulund, Mumbai

Introduction & Objectives: To understand the practice pattern among consultant physicians regarding the diagnosis and treatment of patients presenting with lower urinary tract symptoms (LUTS).
Materials & Methods: A questionnaire comprising of 22 questions was administered to 257 Indian Physicians and their management practices were assessed.
Results: Most physicians encountered patients suffering with LUTS in their practice (48% noted LUTS in 10-20% patients while 30% observed in >20% patients). Most patients (47%) had symptoms for 3-6 months while 34% reported it as <3 months.
Initial evaluation included urine examination & transabdominal ultrasonography (>80%), followed by PSA (73%) & Renal Function Test (61%). In case of elevated PSA, only one-third were referred to urologist while 41% were managed with short course of antibiotics and 19% directly opted for advanced imaging (TRUS, MRI). Nearly half of the physicians treated patients with LUTS without doing digital rectal examination (DRE).
\( \beta \)-blocker monotherapy was the first line treatment in most patients (37%) while 30% used \( \beta \)-blockers irrespective of the prostate size. About half (45%) used a combination of \( \beta \)-blocker + 5-\( \beta \)-Reductase-Inhibitors in all cases with enlarged prostate, while 37% reserved it for only moderate-severe cases. The commonest \( \beta \)-blocker used by physicians was tamsulosin whereas few chose silodosin for elderly patients & alfuzosin for younger patients.
Conclusion: Most physicians encounter patients with LUTS and are conversant with medical management of LUTS. There is a scope of improvement in selecting patients for PSA testing, regular DRE assessment and timely referral to urologist for management of elevated PSA

POD 05 – 05
Single centre study comparing HOLEP with TURP in bladder outlet obstruction due to Benign enlargement of prostate gland more than 40cc or grade 2.
Dr Hosamani Amit, Dr P John Roy
Medical Trust Hospital, Kochi

Introduction and Objective: To compare Holmium laser enucleation of the prostate (HoLEP) with transurethral resection of the prostate (TURP) for treatment of BOO due to benign prostatic enlargement in glands 40-120cc with a 12-month follow-up.
Methods: All patients with symptomatic BOO were subjected to TURP or HOLEP randomly. The two procedures were compared based on the following perioperative and postoperative parameters, namely, resection time, requirement of blood transfusion, catheter time, hospital stay, complications, incontinence, re-surgery, IPSS score, peak urinary flow rate, post void residual urine and QoL and tabulated at 2, 6, 30 weeks and 12 months.
Results: There were no significant differences between the two surgical groups pre-operatively. Resection time for HOLEP was 85±30 mins compared to 70 A± 30mins for TURP. Patients in the HoLEP group required less irrigation, shorter catheter time & Average hospital stay. TUR syndrome was seen in only TURP group (2.5%). The hemoglobin drop was comparable but none required transfusion. Immediate post-op Re-catheterisation rate was 7% and 3% who eventually were off catheter after 2 weeks. Incontinence was seen in 5.5% of TURP group and 2.5% in Holep. Re-surgery rates were 1% and 3.5% in holep and TURP group respectively. Peak flow rates, PVR, IPSS score and QoL was comparable in both groups during 12-month follow-up.
Conclusion: HOLEP is an efficient technique in the endoscopic management of benign prostates of all sizes as it has less perioperative morbidity, complications with reduced re-surgery rates compared to TURP. Hence should be in every Urologist’s armamentarium.

POD 05 – 06
Effect of Real time visualization of Cystourethroscopic procedure in males on pain score, anxiety status and hemodynamic parameters

Dr Sugam Godse, Dr MK Chhabra, Dr Gordhan Chaudhary
Dr S N Medical College, Jodhpur

Introduction and objective: To assess the impact of visualization of cystoscopic procedure on pain scores, anxiety status and hemodynamic parameters in male patients during rigid cystoscopy

Methods: From October 2019 to March 2021, the study was conducted in the Urology department. Two groups of patients were formed of 25 patients each. During cystourethroscopy, patients in Group A were not allowed to observe the video screen. Patients in Group B were allowed to watch the video monitor.

The procedure was described to all the patients. Before cystoscopy, all patients received 10 cc 2 percent viscous lidocaine intraurethral. There were no sedatives or analgesics used. Before the operation, all patients gave their consent, and they were asked to record their discomfort on a visual analogue pain scale as soon as the procedure was completed.

The pulse rate, as well as the systolic and diastolic blood pressure, was measured 5 minutes before the surgery and again as the cystoscope passed through the external urethral sphincter

Results: Age, BMI, marital status, educational background, and the rationale for cystoscopy were all equivalent in both groups. The mean pain score on the VAS in group B was significantly lower than that in Group A (2.87 ± 1.47 vs. 6.12 ± 1.85, p < 0.001, Mann-Whitney U test). A statistically significant difference was found between the two groups in terms of anxiety scores after cystoscopy (p < 0.001), intraoperative systolic BP (p=0.02), diastolic BP (p=0.012), and pulse rate (p<0.001). Patients who were permitted to view the video screen reported reduced pain and anxiety.

Conclusion: The comfort of patients is improved by real-time vision of rigid cystoscopy with simultaneous explanation.

POD 06 – 01
The effect of Covid-19 on lower urinary tract symptoms in elderly men
Dr Karthi A P, Dr Shanmughadas KV, Dr Rajeevan AT, Dr Dineshan KM, Dr Venugopalan AV
Government Medical College, Kozhikode

Introduction & Aims: COVID-19 has affected systems other than the respiratory system such as cardiovascular, renal, neurological, and gastrointestinal systems. However, all symptoms and features of COVID-19 are still unknown. Also it can be detected in urine samples although unreliably, this suggest the need to investigate whether the virus has effect on the urinary tract especially those who are with pre-morbid conditions such as BPH. Hence the study aims to assess the effect of COVID-19 on the LUTS measured objectively by the IPSS.

AssWe aimed to evaluate the change in lower urinary tract symptoms (LUTS) after COVID-19 in elderly men and also the correlation of LUTS scores with severity and mortality of covid infection.

Methods: This observational cross-sectional study was conducted among 76 men with LUTS who got admitted in covid ward and followed up after 3 weeks in urology outpatient clinic. Patients were divided into two groups based on age. (age <50 and >50years) Men with urinary tract infections and neurogenic LUTS were excluded from the study. International Prostate Symptom Scores (IPSS) was used to categorise patients into mild (IPSS 0-7), moderate (IPSS 8 – 19) and severe (IPSS 20 – 35) symptom groups. CT severity index was used to categorise the severity of covid 19 infection into mild (<7), moderate (8-17) and severe (≥18) IPSS of patients post covid were compared with pre covid values using Paired t test separately in two age categories. Also correlation between IPSS and CT severity score was also assessed.

Results: The study population for the study was 76 patients. Mean age of the patients in the study was 61.8 ± 8.91. Assessment of IPSS pre and post covid was done and correlation tested with paired t test revealed significant p value (p value 0.021) in patients with age more than 50 years while p value for patients less than 50 years is 0.12. Paired t test was also used to study the correlation of IPSS and CTSI which revealed a p value of 0.23 which is not significant

Interpretation of Result: Paired t test done for comparison of pre and post covid IPPS showed a significant p value, that shows a definite role of covid 19 in the worsening of LUTS in elderly men ( age > 50) but didn’t show a significant worsening of LUTS in men < 50years of age. The same was done to analyse correlation between IPSS and CTSI which also revealed an insignificant p value showing no correlation between severity of covid infection and IPSS.

Conclusion: LUTS may be one of the symptoms of COVID-19 in some patients. Elderly patients with increased LUTS should be evaluated for COVID-19 when the reason is unclear.

POD 06 – 02
Dual alpha blocker therapy - Efficacy and safety of additional alpha blocker in relieving luts secondary to BPE in patients not responding to single alpha blocker: Interim analysis

Dr P Adhikari
JNMC, Belagavi
Introduction: Lower urinary tract symptoms (LUTS) associated with benign prostatic enlargement (BPE) affect about 20% of 40-year-old males and almost 50% of men in their 80s. [1,2] Treatment goals are the relief of bothersome LUTS that interferes with daily activities and decreases quality of life of one. Historically treatment options were watchful waiting, herbal preparations, lifestyle modifications and surgical procedures. Since the 1900s the medical management of LUTS secondary to BPH changed significantly with alpha-blockers (AB) and/or 5 alpha reductase inhibitors (5ARI).

POD 06 – 03
Evaluating outcomes of combined bladder neck and supramontanal sparing ejaculatory preserving TURP: Results from a prospective, randomised study.
Dr A Nishith, Dr Prasad Mylarapa, Dr Manasa T, Dr P Sandeep Ramaiah Medical College, Bengaluru

Introduction: Although conventional TURP is highly successful in improving urinary symptoms and flow rates, a higher incidence of loss of antegrade ejaculation has been reported. In our study, we aimed at prospectively comparing the efficacy and outcomes of a novel dual bladder neck and supramontanal sparing TURP to conventional TURP to improve voiding and ejaculation.

Methods: Between January 2019 and November 2020, all patients with BPH satisfying the eligibility criteria underwent either supramontanal with bladder neck sparing TURP (Group A) or classical TURP (Group B) after randomisation. The groups were compared for functional outcomes including IPSS, peak flow rates, postvoid residual urine, perioperative variables and postoperative complications. Ejaculation after surgery was assessed with 15 question International index of erectile function (IIEF) score and Ejaculation Projection score (EPS).

Results: A total of 90 patients were randomised equally to Group A and B respectively. In both groups, significant improvements noted in Qmax [6.29 ± 2.64 mL/s to 21.94 ± 3.83 mL/s (group A) and 7.03 ± 2.71 to 21.58 ± 5.22 mL/s (group B)] and reduction in IPSS score [26.6 ± 3.45 to 4.36 ± 1.74 (group A) and 26.12 ± 2.88 to 4.69 ± 0.87 (group B)] postoperatively were comparable. Group A had a significant improvement in both IIEF 15 score (60.53 ± 4.92) and EPS (3.49) when compared to Group B (p < 0.001) with 88.88% reporting antegrade ejaculation (vs 22.22% in Group B). A statistically higher incidence of bladder neck contracture was observed in Group B at 3 months follow up.

Conclusion: Combined Bladder neck and supramontanal sparing TURP is superior to classic TURP in preservation of forward ejaculation and prevention of post operative bladder neck contractures with comparable outcomes in terms of voiding parameters.

POD 06 – 04
Institutional experience of obturator block in TURBT in COVID-19 era: A series of 111 cases.
Dr Prabhnoor Singh, Dr Mukesh C Arya, Dr Jaiprakash Swami, Dr Ajay Gandhi, Dr Ankur Singhal, Dr Ramnaresh Daga Sardar Patel Medical College, Bikaner

Introduction: Ca bladder is 4th most common urological malignancy. TURBT is the most commonly performed procedure in which Obturator nerve stimulation may lead to obturator reflex, adductor contraction, and leg jerking with complications such as bleeding, bladder perforation, or incomplete tumor resection. To avoid need of general anaesthesia for prevention of obturator jerk in COVID era, experience of obturator block is shared below.

Material and method: In last 14 months, among 156 cases, we used obturator block under fluoroscopic guidance in 111 patients with tumours on posterolateral and lateral wall of bladder were selected with size ranging from 2-8 cm without any extravesical spread as documented on CECT whole abdomen.

Results: Among these 111 patients, 69 patients had no adductor spasm, 41 patient and grade 1 (50% reduced) adductor spasm and only 1 patient had significant (grade 0) adductor spasm for which minor perforation occurred and general anaesthesia has to be administered for the completion of the procedure and abdominal drain was put along with long term catheter.

Discussion: Fluoroscopic guided Obturator block is a simple, easy and cost-effective technique in the urologic armamentarium which can potentially substitute for airway instrumentation and hemodynamic consequences of general anaesthesia.

Conclusion: Obturator block is a reliable technique for prevention of obturator jerk during TURBT in COVID-19 era resulting in good patient and surgeon satisfaction and should be included in the urology curriculum as a basic procedure for the urology residents and trainees.

POD 06 – 05
Monopolar versus bipolar transurethral resection of the prostate in patients with benign prostatic enlargement: A randomized controlled trial.
Dr Ranjan R, Dr Kumar S, Dr Naviya S, Dr Mittal A, Dr Mammen KJ, Dr Mandal AK AIIMS, Rishikesh
Introduction and objective: Benign prostatic enlargement (BPE) is one of the most common problems of aging males. BPE produces variety of lower urinary tract symptoms which can lead to simple disturbances in work to severe restriction of day-to-day activities leading to poor quality of life. Transurethral resection of the prostate (TURP) is considered as ‘gold-standard’ surgical treatment. Literature is conflicting regarding merits of bipolar over monopolar TURP, so we conducted this randomized controlled trial to critically evaluate the safety, efficacy and complications of monopolar and bipolar TURP.

Methods: Sixty subjects were enrolled and randomised into two groups; M-group (monopolar) and B-group (bipolar) as per computer-generated randomization table. They were evaluated and compared on the basis of various pre-operative, post-operative and follow-up (1 week, 1 month and 3 month) parameters. Statistical analysis was done using SPSS-25.

Results: Compared to monopolar-group, bipolar-TURP had significantly lesser degree of fall in haemoglobin (0.37±0.52 vs 0.69±0.52 gm/dl, p<0.02), haematocrit (0.81±1.75% vs 1.74±1.69%, p<0.04), serum sodium (1.6±3.5 vs 5.6±3 mEq/l, p<0.001) and histopathological artefacts (glandular and depth of stromal artefact, 170.8±51.41 vs 407.8±165.04 /4/m, p<0.001); no risk of TUR syndrome and shorter hospital stay (3.1±0.61 vs 3.8±1.67 days, p<0.03). Resection time was significantly shorter in monopolar group (60.5±19.45 vs 72.5±15.96 minutes, p<0.01).

Conclusion: Bipolar-TURP unquestionably holds promise in reducing the two most common complications of monopolar-TURP, i.e., haemorrhage and dilutional hyponatremia. Bipolar TURP appears safe and equally effective as monopolar; thus, Bipolar TURP has the potential to become the procedure of choice for the surgical management of BPE

POD 06 – 06
Thulium Laser Prostatectomy: A Single Centre experience from India
Dr S Muqquarab Ali Khan, Dr P Vamsi Krishna
Care Hospital, Hyderabad

Introduction: Thulium LASER enucleation of the prostate (ThuLEP) was introduced as a minimally invasive, size-independent treatment for BPH (Benign prostatic hyperplasia). It delivers improved vaporization ability, ensuring smooth tissue incisions. The surgeon can remove the prostate gland accurately, permits smaller and more precise cutting and consequently decreased the risk of bleeding.

Objective: To assess the safety and efficacy of Thulium LASER prostatectomy

Methods: In a prospective observational study, thirty (30) patients with symptomatic BPH were treated with ThuLEP from September 2019 to September 2021 at our institute by a single surgeon.

Inclusion Criteria: Bothersome LUTS (lower urinary tract symptoms) with prostate > 25 cc. Failed medical therapy, Acute urinary retention, Recurrent UTI due to prostatomegaly, Upper urinary tract changes due to BPH and BPH with vesical calculus.

Exclusion Criteria: Carcinoma prostate, Neurovesical dysfunction, history of urethral/ prostatic surgery, Urethral stricture.

Results: ThuLEP was highly effective and safe in terms, even in high risk patients. Duration of hospital stays 1 day in 7(23.3%), 2 days in 22(73.3%) and 3 days in 1(3.3%) patients. Haemoglobin drop: 1.38±0.58 g/dl

Post-op =1.97±1.21, QoL (quality of life) = pre-op=5.47±0.1and post-op= 0.57±0.67

Conclusions: Thulium LASER is a safe and highly effective LASER in terms of reduced Duration of hospital stay, blood loss, speed and ease of tissue resection with an improvement of IPSS, QoL and minimal post-surgical complications.

POD 07 – 01
Outcome analysis of open dual kidney transplant from suboptimal donors from a tertiary care center: Retrospective, observational study
Dr Kuman Suresh, Dr Rizvi S Jamal, Dr Pal B Chandra, Dr Kataria Subhash, Dr Bagariya Mahesh, Dr Mod Pranjal
Institute of kidney disease & research center, Institute of transplantation sciences, Ahmedabad

Introduction and objective: Renal transplantation is treatment of choice for end stage renal disease with better quality of life than maintenance hemodialysis. To circumvent gulf between demand and supply of organs, Dual kidney transplant (DKT) is one way for maximal utilization of organs from sub-optimal donor since single kidney transplantation from these donor may not give optimal results.

Methods: Since July 2010-December 2019, number of patients who underwent open DKT were retrospectively analyzed. Exclusion criteria were robotic DKT and En-bloc kidney transplant from pediatric donors. Donor demographic profile, cause of brain death, terminal serum creatinine at retrieval time were noted. Frozen section renal biopsy, when indicated, was done. Primary end point is to determine patient and graft survival at 1, 3, 5 and 7 years. Secondary end point is to determine serum creatinine trend among recipients with functioning graft.

Results: All donors were brain-dead, heart-beating donors. Mean age was 66.27 years (range 50-78) and male to female ratio was 28:18. Forty-four recipients underwent open dual kidney transplant. Mean age was 49.90 years
(range: 26-66) and male to female ratio was 28:16. Both grafts were placed in ipsilateral iliac fossa. Patient survival and graft survival at 1, 3, 5 and 7 year respectively were 90.8%, 85.9%, 75.2%, 69.9% and 90%, 87.4%, 83% and 76.1%. Serum creatinine was maintained 1.5-2.6 mg/dl among 4 recipients and below 1.5 mg/dl among rest of recipients with functioning graft at one year.

Conclusion: DKT provides acceptable patients and graft survival, rendering majority of patients dialysis-free.

POD 07 – 02
Pre-Transplant Nephrectomy: Analysis of Last 40 Years from a Single Institute
Dr Rohan Batra, Dr Deval Parikh, Dr Abhishek Singh, Dr Arvind Ganpule, Dr Ravindra Sabnis, Dr Mahesh Desai
MPUH Nadiad

Introduction and Objectives: Native nephrectomy is the nephrectomy done in patients with end stage renal disease. We review and analyze pre-transplant nephrectomy in a single institute and changing trends of pre transplant nephrectomy over last forty years.

Materials and Methods: Data was retrospectively collected from the transplant registry maintained at our institute. Between April 1980 and December 2020, a total of 101 patients underwent pre transplant nephrectomy. Data of 94 patients was available for analysis.

Results: Total of 140 renal units were operated in 94 patients. Mean age was 43.04±10.7 years and male to female ratio was 6.23:1. In 53 patients (56.38%) the procedure was laparoscopic. 46 patients underwent bilateral nephrectomy (92 renal units) while 48 patients underwent unilateral nephrectomy. 18 patients underwent simultaneous bilateral nephrectomy. Most common indication for nephrectomy was ADPKD (62 patients (65.95%) followed by recurrent pyelonephritis due to stone disease (10.63%) and reflux nephropathy (9.57%). 4 patients (4.25%) had renal mass (Clear cell RCC). The trend after the year 2000 was towards laparoscopic nephrectomy (70.66%). On comparing open and laparoscopic nephrectomy, mean hospital stay in open group was 7.26±2.9 days as compared to 4.86±1.9 days in laparoscopic group. Complications were higher in open group (26.82%) as compared to laparoscopic group (19.51%). Graft survival was equivalent and statistically insignificant when compared to overall transplant group at 10 years (59.1% vs 61.3%) and 15 years (46.1% vs 44.3%).

Conclusion: Pre-transplant laparoscopic nephrectomy is safe and feasible in CKD patients, even with ADPKD. Pre-transplant nephrectomy does not negatively impact graft survival in patients.

POD 07 – 03
Robotic kidney transplantation for renal allograft with multiple renal arteries
Dr Anil Jangid, Dr Pranjal Modi, Dr S Kumar
IKDRC ITS, Ahmedabad

Introduction and Objective: Robotic kidney transplant with multiple renal arteries have high risk of vascular and urological complications. Our aim is to evaluate vascular, urological complications, and renal function of RKT with allograft having multiple arteries.

Method: A retrospective study of 475 patients who underwent live robotic renal transplant from June 2013 to June 2020. Donor and recipient demography, intra-operative data, assessment of allograft function at 7 days, 1 month, and 1 year were recorded.

Results: Patients were divided into two groups. Out of 475 grafts, 392 grafts (82.5%) had a single renal artery (SRA). 83 patients (17.5%) had multiple renal arteries (MRA). 75 allografts had 2 arteries, 8 grafts had 3 arteries. In all cases, single arterial and venous anastomoses could be performed after vascular reconstruction. Mean anastomosis time in SRA was 31.84 min and MRA 32.38. The mean warm ischemia time in the MRA group was 130 seconds, that in the SRA group was 120 seconds. The mean cold ischemia time in graft with multiple renal arteries was 87.92 minutes in MRA and 58.48 min in SRA. The mean creatinine levels at 1 month (1.28 mg/dl in the MRA group and 1.22 mg/dl in the SRA group) and 12 months (1.26 mg/dl in MRA group and 1.2 mg/dl in SRA group) were comparable.

Conclusion: Renal allograft with multiple arteries thought technically difficult but gives results which are comparable with grafts having a single renal artery.

POD 07 – 04
Retroperitoneoscopic donor nephrectomy in presence of abnormal venous anatomy- donor and recipient outcome
Dr Virendra Kumar Soni, Dr Pranjal Modi, Dr Syed Jamal Rizvi, Dr Suresh Kumar
IKDRC ITS, Ahmedabad

Aims & Objectives: Laparoscopic donor nephrectomy is now a commonly performed procedure in most of renal transplantation centers. However, the suitability of laparoscopy for donors with anomalous vasculature is less well known.

Materials and methods: Between may 2008 and may 2019, 1742 laparoscopic donor nephrectomies were performed in our institution. All donors were evaluated with preoperative three-dimensional spiral computed
tomography (CT) angiography. 82 (4.7%) donors had a left renal vein anomaly. A retrospective analysis was performed to collect donor and recipient demographics and perioperative data.

Results: All laparoscopic procedures were completed successfully except one that was converted to open surgery. 27 (32.9%) donors had a type I retroaortic vein, 15 (18.2%) had type II retroaortic vein, 39 (47.5%) had circumaortic vein and a Type IV renal vein was seen in 1 (1.2%) donor. The mean operative time was 155.92 ± 75.63 minutes and mean warm ischemia time was 172.5 ± 84.17 seconds. The mean blood loss was 60.3 ± 102.26 mL and one donor required blood transfusion.

POD 07 – 05
Robotic kidney transplantation from deceased donor
Dr Subhash Katariya, Dr P Modi, Dr S Kumar.
IKDRC ITS, Ahmedabad

Introduction And Objectives: Renal transplant is the standard of care in ESRD patients. The robotic transplant has been shown to achieve excellent patient and graft outcomes while reducing surgical morbidity. However, the vast majority of robotic transplants performed so far were from living donors. Our aim is to report our experience of perioperative variables, vascular & urological complications, and graft outcomes after robotic transplants from deceased donors.

Methods: A retrospective study of 540 patients who underwent robotic renal transplant from June 2013 to June 2020. Out of which 65 were deceased donors. Different parameters donors and recipient’s demographics, intra-operative data, assessment of renal allograft function at 7 days, 1 month, and 1 year were recorded.

Results: Mean operative time was 215.71 min. Mean anastomosis time was 37.71 min. Mean ureteric reimplantation time was 32.93 min. Mean rewarming time was 56.71 min. Mean console time was 167.93 min. Mean docking time was 9.81 min. Mean undocking time was 17.77 min. Mean blood loss was 97.88 ml. Mean pretransplant serum creatinine was 6.60 mg/dl. Mean serum creatinine at 7th day, 1 month, and 1 year were 2.81, 1.74, and 1.79 mg/dl respectively. Mean pretransplant eGFR was 10.50 ml/min. Mean eGFR at 7th day, 1 month, and 1 year were 32.52, 59.59, and 64.05 ml/min respectively.

Conclusion: Robotic renal transplant with cadaveric renal allografts gives results that are comparable with open transplant with the added benefit of reducing surgical morbidity.

POD 07 – 06
Transvaginal insertion of kidney and robotic kidney transplantation
Dr Mahesh Kumar Bagriya, Dr P Modi, Dr S Kumar
IKDRC ITS, Ahmedabad

Method: A retrospective study of 37 female patients who underwent robotic renal transplant with transvaginal insertion of kidney at IKDRC Ahmedabad from June 2013 to June 2020. Major inclusion criteria were at least one normal vaginal delivery and good capacity of vagina on examination. Exclusion criteria were active vaginal infection and atrophic vagina. Prophylactic antibiotic were used.

Result: In the patients who underwent transvaginal (TV) kidney transplant; Mean age was 38.0 years, Mean BMI was 20.08 Kg/m2, Mean operative time was 212.3 minutes, Mean Blood loss was 108 ml, Analgesic requirement (Morphine) in first 48 hours after surgery was 1.22 mg. Mean Sr. Creatinine level on post op Day 1 - 1.6 mg/dl, at 1 Month -1.1, and at 1 Year -1.13 and Mean hospital stay was 7.58 days.

Conclusion: Vaginal insertion of kidney and RKT is feasible, safe and cosmetically acceptable. With use of preoperative vaginal preparation and prophylactic antibiotics, it carries minimal risk of transmission of infection from the vagina to the abdominal cavity. RKT through transvaginal insertion is associated with significant less pain and morbidity in comparison to conventional transabdominal kidney insertion in recipients.

POD 08 – 01
Comparison of retroperitoneoscopic nephrectomy for non-pyonephrotic versus pyonephrotic non-functioning kidneys: a prospective study
Dr Handa RR, Dr Rizvi SJ, Dr Modi PR, Dr Kumar S
IKDRC Ahmedabad

Introduction and Objective: Benign non-functioning kidneys (NFKs) are a commonly encountered problem in day to day urological practice. Laparoscopy (Transperitoneal/Retroperitoneal) is the standard of care for removal of benign NFKs. The aim of our study was to compare retroperitoneoscopic nephrectomy (RPN) in non-pyonephrotic and pyonephrotic benign NFKs.

Methods: In the present prospective clinical study, RPN was performed in 50 patients with non-pyonephrotic NFK (Group A) and 50 patients with pyonephrotic NFK (Group B) over a period of 18 months from July 2018 to December 2019. Operative time, estimated blood loss, intra-operative complications, conversion rates, post-operative complications and hospital stay were compared among the two groups. Patients were followed up in OPD at 1 month and 3 months post-operatively.
Results: The indications of RPN were stone disease (70.0%), PUJ obstruction (22.0%) and GUTB (3.0%). In Group B, intraoperative complications were significantly higher than Group A (26.0% v/s 4.0%). Postoperative complications were observed in 10 patients of group B. Conversion to open surgery was required in 6 patients of Group B only. The operative time, blood loss and post-operative hospital stay were significantly shorter in Group A than Group B (Operation time -101.7 ± 13.13 min v/s 156.1 ± 27.86 min; Blood loss - 30.5 ± 10.94 ml v/s 114.70 ± 63.22 ml; Hospitalization time -1.45 ± 0.52 days v/s 2.72 ±1.36 days). Conclusion: RPN is a feasible, safe, and effective minimally invasive procedure for both pyonephrotic and non-pyonephrotic non-functioning kidneys. RPN for pyonephrotic kidneys can be safely performed with experience.

Right Laparoscopic Adrenalectomy for Large Adrenal Mass: How to tame the Formidable?
Dr Ruchir Maheshwari, Dr Samit Chaturvedi, Dr Amit Bansal, Dr Pratik Garg, Dr Vinay Rai, Dr Anant Kumar
Max Superspeciality Hospital, Saket, New Delhi

Introduction: Large adrenal tumors (> six centimeters) warrant surgical removal. Right sided lesions are considered especially formidable due to anatomical characteristics. Herein we describe our experience of right sided laparoscopic adrenalectomy.

Materials and Methods: We report eight cases of large adrenal mass managed laparoscopically. All patients were thoroughly evaluated with radiological and functional studies. Modified port placement was done in L shape with camera port done at the angle of L. Right hand port is placed four centimetre superior to camera port and Left hand port four centimetre lateral to camera port. Another 5mm port is placed just below xiphisternum as liver retractor port. After mobilising hepatic flexure, upper pole of kidney was separated from the tumour, followed by dissection along IVC. This ensured a bloodless field with good exposure of adrenal vein.

Results: Eight cases of right sided large adrenal mass were managed laparoscopically between October 2019 to February 2021. Patient details are tabulated below

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td>26 - 70</td>
</tr>
<tr>
<td>Male: Female</td>
<td>5:3</td>
</tr>
<tr>
<td>Presentation</td>
<td>6 Incidental: 2Hypertension</td>
</tr>
<tr>
<td>Size (in cm)</td>
<td>6 - 12</td>
</tr>
<tr>
<td>Operative time</td>
<td>90 - 132 min</td>
</tr>
<tr>
<td>Blood loss</td>
<td>60 - 150 ml</td>
</tr>
<tr>
<td>LOS</td>
<td>2 - 4 days</td>
</tr>
<tr>
<td>HPE</td>
<td>Adrenal myolipoma 5</td>
</tr>
<tr>
<td>Adrenal adenoma</td>
<td>1</td>
</tr>
<tr>
<td>Phaeochromocytoma</td>
<td>2</td>
</tr>
</tbody>
</table>

There was no conversion or Clavian Dindo Grade 3 or higher complications observed.

Conclusions: With our technique, we were able to manage apparently formidable adrenal masses safely without any significant morbidity to the patient.

Salvage Laparoscopic Pyeloplasty - New tool for failed pyeloplasty in 2021!
Dr Patel S, Dr Sarma D, Dr Barua SK, Dr Rajeev TP, Dr Bagchi PK, Dr Phukan M
Gauhati Medical College and Hospital, Guwahati,

Introduction & Objectives: Salvage Laparoscopic Pyeloplasty is emerging treatment option for failed pyeloplasty, as urologist getting more exposure in laparoscopy. We analyzed the operative and postoperative complication and functional outcome of salvage laparoscopic pyeloplasty.

Materials & Methods: This is a retrospective study, in which 26 patients (Primarily 17- operated by open approach, 09- laparoscopically) were operated with salvage laparoscopic pyeloplasty over 10 years. Recurrent obstruction was confirmed by DTPA scan in 21 cases and CT-IVU in 05 cases. Laparoscopic repair comprised dismembered pyeloplasty in 07 cases, flap pyeloplasty (v flap) in 15 cases, 5 cases with ureterocalicostomy, in all cases DJ stent kept for 6 weeks. PCN kept in 17 cases with pyelonephritic changes in kidney. DTPA scan or CT-IVU was done during follow up.

Result: Average operative time and hospital stay was 4.37 hours and 5 days respectively. 1 case was converted to open for intraoperative complication (bleeding) in ureterocalicostomy. Postoperative complications - anastomotic leakage in 3cases, UTI with fever in 9 cases. 21 patients had patent UPJ (Ureteropelvic junction) on CT-IVU/renal scan. 2 patients had equivocal findings but asymptomatic and renal scan finding obstructed. 2 patients had failed salvage pyeloplasty. Overall all patients had decreased pain (>80%) postoperatively. Overall 84% cases had patent UPJ with improvement in symptoms and improved affected renal function.

Conclusion: Salvage laparoscopic pyeloplasty is a viable treatment option for patients who had failed previous pyeloplasty done either open or laparoscopically. This approach provide good success rate with less morbidity, early recovery, less postoperative pain and less hospital stay. Although operation is time consuming and technically challenging and should be done after acquiring adequate laparoscopic skill.
Can Laptops Nephronecros, Xantho Granulomatous Pyelo Nephritis be considered as standard of care? - A retrospective single center analysis

**Introduction and Objective:** In the era of minimally invasive surgery, less literature is available which has evaluated the use of a laposcopic approach in xanthogranulomatous pyelonephritis (XGPN) with variable results. This series aims to report the safety, equality, complications and techniques for successful laparoscopic nephrectomy (LN) in XGPN in comparison to open approach. This represents one of the largest series to date comparing laparoscopic and open nephrectomy (ON) for XGPN.

**Methods:** A retrospective analysis of 117 and 50 patients who underwent laparoscopic and open nephrectomy respectively with a pathological diagnosis of XGPN from January 2001 to December 2020 was done. The demographic profile, clinical presentation, intraoperative techniques, post-operative parameters and complications were obtained.

**Results:** LN was successfully performed with certain modifications from standard techniques in 120 patients out of which 3 patients were converted to open approach due to adhesion, bowel injury, and pleural injury respectively. There was significant difference in hospital stay (p=0.004), wound infection (p=0.008) and post-operative drain placement (p=0.00) between LN and ON groups. Operative time (minutes) was 101.46 ± 33.6 and 111.44 ± 47.96 in LN and ON groups respectively (p=0.05). Pre-operatively Percutaneous nephrostomy (PCN) was kept in 60 and 33 patients in LN and ON groups respectively (p=0.05). Both groups were comparable in terms of hemoglobin drop (p=0.21), post-operative drain days (p=0.16) and blood transfusion (p=0.13).

**Conclusion:** Pre-operative PCN or drain to reduce the size of kidney, post-operative sepsis and pre-operative CT scan to guide modifications in the standard laparoscopic technique are needed to complete the procedure successfully.

---

Can we define ideal pneumoperitoneal pressures on the basis of intra-operative and post-operative physiological parameters in adult laparoscopic renal surgeries? – A prospective randomized study

**Introduction/Aims:** There aren’t properly validated studies defining safe and ergonomically efficient pneumoperitoneal pressure (PP) for transperitoneal laparoscopic renal surgeries (LRS). This study aims to define ideal/safe pneumoperitoneal pressure in various transperitoneal LRS.

**Methods:** In a prospective, randomized setting (April 2019-March 2020), 78 adults were randomized in 3 groups based on pneumoperitoneal pressure (Group I, 8-10 mmHg; Group II, 11-13 mmHg and Group III, 14-16 mmHg). Hemodynamic parameters and blood gas were measured at four points: before CO2-insufflation (T0), 10 min after insufflation (T1), before desufflation (T2) and 10 min after desufflation (T3). Postoperative pain at 1, 6, and 12 hours and time to start oral feeds were noted. Technical feasibility was evaluated based on successful surgery completion, duration and intraoperative complications.

**Results:** Group I and II showed similar hemodynamic and ventilatory parameters at T1 and T2. In Group III, hemodynamic and respiratory changes were more pronounced at T1 and T2. At T3, most parameters were statistically restored to baseline in Group I and II but not in Group III. Mean postoperative pain at 1 hour was least in group I, but comparable between group I and II at 6 and 12 hours. Postoperative pain and time to start oral feeds was significantly greater in Group III. In group I, 5 patients, all with BMI >30 were excluded from analysis due to crossover to group II due to operative difficulties. Perioperative complications were similar among groups.

**Conclusion:** Pneumoperitoneal pressures of 10 mm Hg or less cause least disturbance in intra- and postoperative homeostasis and is ideal for LRS. However, technical difficulty may be encountered in obese patients, requiring higher pressures. Pressure above 13 mmHg should be avoided.

---

Prospective evaluation of outcomes of transperitoneal 3-d laparoscopic radical prostatectomy

**Introduction:** Conventional laparoscopy has limited freedom of movement, lacks depth perception and has a steep learning curve which can be overcome with robotic assistance, however this is limited in its cost and accessibility. Three-dimensional(3D) provides stereoscopic vision, superior image quality and is easily accessible across centres. In this study, we have prospectively evaluated the outcomes of 3D-laparoscopic radical prostatectomy in achieving the pentaecta- biochemical recurrence (BCR) free rates, continence, potency, negative surgical margin and absence of complications.
Materials & Methods: This prospective randomized study, approved by institute’s ethics committee was carried out at a tertiary care centre from December 2018 to June 2020. Patients (≤76 years) with life expectancy of at least 10 years diagnosed with cancer prostate (cT1-3N0-1M0) were included in the study. Eligible patients underwent 3D laparoscopic trans-peritoneal radical prostatectomy and were followed up at 1 month, 3 months and 6 months for continence (pads used), potency (IIEF-5 score) and serum prostate specific antigen (S.PSA). Surgical margins in the histopathology report and post-operative complications (Clavien-Dindo) were also noted.

Results: From a total of 30 patients included in the study, continence rates at 1 month, 3 months and 6 months were 48.28%, 73.33% and 90% respectively with respective potency rates being 23.33%, 30% and 40%. BCR free rate was 100% at 6 months. Mean complication rate was 23.33% (42.86% grade 2) and only one patient had positive margin, managed with adjuvant radiotherapy. Trifecta was achieved in 40% and pentaecta in 36.67% at 6 months.

Conclusion: 3D-laparoscopic trans-peritoneal radical prostatectomy is safe and efficacious for localized and locally advanced prostate cancer.

POD 08 - 07
Retroperitoneoscopic living donor nephrectomy for right side kidney and robotic kidney transplantation compared to left donor kidney robotic kidney transplantation
Prasad SR, Dr. P Modi, Dr. J Rizvi, Dr. Suresh kumar
IJDRC ITS, Ahmedabad

Introduction And Objectives: Robotic Kidney Transplantation (RKT) is standard of care at our hospital in hands of experienced surgeon. Transplantation of right kidney (RK) from living-donor is challenging as Right renal vein is shorter and thinner than the left renal vein. Data for RKT of RK are very few. Our aim is to evaluate intra-operative problems, immediate and late graft function after robotic transplant from RK donors compared to left donor kidney Robotic transplant.

Methods: A retrospective study of 475 patients who underwent RKT from January 2013 to June 2020. All do living donor nephrectomy were done by Retroperitoneoscopic approach, Different parameters donors and recipient's demography, intra-operative data, assessment of renal allograft function at 7 days, 1 month and 1 year were recorded

Results: Donor data for - Left (393 patients) Right (82)
Warm ischemic time (min) - 138.6 , 187.7
Operative time (min) - 128.5 , 131.2
Blood loss(ml) - 48.5 , 45.2

Recipient data - who used left and right donor kidney respectively
Anastomosis time (min) - 31.6, 33.6
Operative time (min) - 202.1, 213.6
Graft Loss - 7.1%, 9.7%
Mortality - 6.87%, 9.75%
e gfr (ml/min, pod 7)- 16.1, 13.6
e gfr (1 month) - 75.1, 72.2
e gfr (1 year) - 85.4, 78.9

Conclusion: RKT with right donor kidney results are comparable with Left donor kidney RKT with added benefit of reducing surgical morbidity.

POD 08 - 08
Laparoscopic adrenalectomy for large adrenal tumor (>10cm) and it’s outcome in terms of perioperative, postoperative morbidity and complication
Patel S., Barua S.K., Sarma D., Rajeev T.P., Bagchi P.K., Phukan M.
Guwahati medical College, Guwahati

Introduction And Objective: The size threshold for offering laparoscopic adrenalectomy is controversial as the prevalence of malignancy increases with increasing tumour size (>6cm). This study examine impact of adrenal tumor size on perioperative morbidity and postoperative outcomes in patients undergoing laparoscopic adrenalectomy with adrenal tumors >10 cm.

Methods: Prospective study of transperitoneal laparoscopic adrenalectomy in adrenal tumor >10 cm size. Perioperative complications. Operative time, Length of hospital stay, postoperative complication and after discharge follow-up data were analyzed by appropriate statistical methods.

Result: Total 18 laparoscopic adrenalectomy done without any mortality or reoperation. (Male:Female=3:1). Mean operative time (port insertion to specimen extraction)- 47 min, mean blood loss-30ml. One patient required a blood transfusion and ionotropic support intraoperatively. Conversion to open not needed. Except for 1 adrenocortical carcinoma all other tumors were benign on pathology (Myelolipoma-08, Benign adenoma-06, Pheochromocytoma benign-03). Average size of tumor extirpated laparoscopically is 11 cm with maximum size being 13x10cm. No recurrence found after 8 months of follow-up.
Conclusion: The safety and effectiveness of laparoscopic adrenalectomy in adrenal tumors >10 cm was studied and found to be feasible with acceptable operative time. Laparoscopic adrenalectomy is minimally invasive with less blood loss and fewer complications, quicker recovery, and shorter hospital stay. Careful preoperative evaluation can decrease the average operating time and intraoperative blood loss of pheochromocytomas. This study demonstrated feasibility of laparoscopic adrenalectomy for tumor >10cm without compromising oncological principle may be considered as the first choice treatment mode for the resection of large adrenal tumor. However necessary skill must be acquired in laparoscopic surgery for venturing in the large adrenal tumor extirpation.

POD 09 – 01
Comparison of Pentafecta outcomes between patients with low and high nephrometry score and to identify the predictors of Pentafecta achievement following robotic-assisted partial nephrectomy
Dr Rajiv Kumar, Dr Das B, Dr Kumar A, Dr Maheshwari R, Dr Chaturvedi S, Dr Kaushal R, Dr Bansal A
JIPMER Pondicherry

Aims and Objectives: To compare Pentafecta outcomes between patients with low and high Nephrometry score and to identify the predictors of pentafecta achievement following robotic-assisted partial nephrectomy (RAPN)

Material and Methods: Total 50 patients who underwent RAPN for localized renal mass (T1 and T2) between 1st April 2017 to 1st April 2019 were included in this combined retrospective-prospective study. Preoperative radiologic evaluation using computed tomography was done to determine the location, size, and characteristics of the tumors and Renal Nephrometry Score (RNS) was used to divide patients into 2 groups, low RNS score group vs moderate to high RNS score group.

Results: The results are as tabulated below. The proportion of patients with WIT >25 minutes was higher in patients with Moderate/high RNS (33.33%) than in patients with Low RNS (18.75%, P = 0.2514).

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variable</th>
<th>Low RNS</th>
<th>Moderate/High RNS</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Average age (years)</td>
<td>42.4</td>
<td>52.9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>3</td>
<td>Pre-operative GFR (ml/min/1.73 m2)</td>
<td>91</td>
<td>78</td>
<td>0.0311</td>
</tr>
<tr>
<td>4</td>
<td>Average tumor size (cm)</td>
<td>3.2</td>
<td>3.8</td>
<td>0.0499</td>
</tr>
<tr>
<td>5</td>
<td>Median operative time (min)</td>
<td>210</td>
<td>256</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>7</td>
<td>Estimated blood loss (ml)</td>
<td>140</td>
<td>180</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

The proportion of patients with Low RNS (46.875%) who achieved Pentafecta outcomes was higher than the proportion of patients with Moderate/High RNS (33.33%) achieving Pentafecta outcomes.

Conclusion: Overall results of this study supported the findings that patients with low RNS score have higher trifecta and pentafecta achievements. Factors associated with higher pentafecta achievements are age less than 40 years, female sex, BMI< 23, tumor size < 3.5cm.

POD 09 – 02
Outcomes of partial nephrectomy in T1a and T1b renal masses - experience from a single centre
Dr Praanjal Gupta, Dr Ramanitharan Manikandan, Dr Laligudi Dorairajan, Dr Sreeag KS, Dr Siddhartha Kalra, Dr Atanu Kumar Pal
JIPMER Pondicherry

Introduction And Objectives: In the era of minimally invasive surgery, partial nephrectomy provides comparable oncological outcomes like radical nephrectomy in small localized renal masses to preserve functional renal parenchyma. However, there is a dearth of literature regarding its efficacy in T1b tumors. We studied the perioperative outcomes in patients undergoing nephron-sparing surgery for T1a and T1b renal tumors.

Methods: On a retrospective review from June 2014 to April 2021, 101 patients were included in the study having T1 tumors. The clinicodemographics, tumors characteristics, pre and postoperative glomerular filtration rate (GFR), complexity scores, surgical approach (Minimally invasive partial nephrectomy-MIPN and Open), duration of surgery, and Trifecta outcomes (warm ischemia time <30 minutes, absence of perioperative complications and negative margins) were evaluated.

Results: Overall, 52 (46%) and 49 (43.4%) patients belonged to T1a and T1b groups, respectively. 39/52(75%) and 34/49(69.38%) patients underwent MIPN (robotic-23, laparoscopic-11) and open nephrectomy, respectively. MIPN achieved trifecta outcomes in 22/49 patients with T1b tumors (p=0.005) Among the T1a and T1b tumors, the mean duration of surgery was 155.92Â±48.56 and 174.9Â±51.4 minutes (p-value=0.06). Median Warm ischemia time was 22 and 28 minutes, respectively (p-value=0.02). Trifecta outcome was achieved in 40/52(76.9%) and 25/50(50%), respectively (p-value=0.008). (Table 1)

Conclusions: Minimally invasive partial nephrectomy can be successfully performed in T1a and T1b renal tumors and achieves significantly better trifecta outcomes. However, the duration of surgery and warm ischemia time tend to be significantly higher for T1b tumors.

POD 09 – 03
Robot Assisted Radical Prostatectomy: Improving urinary continence
Aims and objectives: Post-operative urinary incontinence after Robot Assisted Radical Prostatectomy (RARP) is the most distressing complication. We describe our technical modifications to improve urinary continence rates after RARP.

Methods: We did a retrospective analysis of last 100 RARP cases from our database. We included localized prostate cancer patients who underwent RARP with or without pelvic lymph node dissection from January 2018 to January 2020. Locally advanced cases were excluded. Our technique included preservation of bladder neck, neuro-vascular bundle preservation, maximizing urethral length, posterior reconstruction and anterior reconstruction.

Results: Our continence rates at 1, 3, 6 and 12 months were 62%, 74%, 88% and 92% respectively. The rate of margin positivity was 11%. Most of the complications were minor in nature.

Conclusion: Our technique of bladder neck preservation with combined anterior and posterior reconstruction leads to improved continence rates in the post operative period.

POD 09 – 04
Anorectal Manometry as a tool to evaluate impact of Robotic assisted Radical Prostatectomy on Pelvic floor and its relation with functional post-operative outcomes

Dr Thiruvalar Prabu Anand, Dr Ginil Kumar
Amrita Institute of Medical Sciences, Kochi

Aim of the study is to assess whether the anal sphincteric presssures measured by Anorectal manometer (ARM) helps to predict the short and long term functional outcomes of Robot assisted Radical prostatectomy (RARP), as the urinary sphincteric system along with pelvic musculature can be affected by the surgery.

A prospective cross-sectional study of 30 patients undergoing RARP were subjected to pre-operative and a third post-operative month (ARM). Urinary continence (UI) is assessed with number of pads and Revised Urinary Incontinence Score (RUIS), Erectile dysfunction (ED) with Sexual Health Inventory for Men (SHIM) questionnaire.

Partial correlation was used to find the correlation between UI (RUIS), ED (SHIMs),with pre-op and post-op ARM.

11 (36.7%) of the 30 patients were completely dry while 19 (63.3%) patients had at least one pad usage for UI at three months post-RARP. 27 (90.0%) patients had severe ED at 3 months. The ARM Basal pressure decreased from 58.23 to 54.63 (p = 0.040) in third post-op month. The ARM squeeze pressure changed from 163.90 to 143.57 post RARP (p = <0.001).

Pearson’s correlation between change in Anal basal and squeeze pressure, change in RUIS (p=0.837), (p=0.684) and SHIM score (p=-0.483) (p=0.555), show no statistically significant correlation between them.

The ARM parameters, though could identify the changes in the pelvic floor muscle contraction, evident by the statistically significant reduction in anal squeeze pressures, it did not correlate with the post-RARP outcomes of UI and ED.

POD 09 – 05
Impact of neo adjuvant chemotherapy on post-operative complications in patients undergoing robotic or open radical cystectomy

Dr Arvind Nayak, Dr John Piedad, Dr Yogit Wagh, Dr Anand Sharma, Dr Nikhil Vasdev
Bangalore

Introduction: We aim to assess effects of neoadjuvant chemotherapy on post-operative complications in patients undergoing either open or robotic radical cystectomy

Methods: A single centre retrospective study was conducted in patients undergoing robotic and open radical cystectomy from September 2014 to September 2020. Patient demographic data, T stage, operative and postoperative parameters, pathologic parameters and 90-day complications using Clavien-Dindo classification were analysed. Statistical analysis was carried out using IBM SPSS statistics v20 software. Exploratory analyses with X2 were done to check for statistical significance. P values were significant at <.05.

Results: A total of 77 patients who underwent open radical cystectomy were compared with 82 patients who underwent robotic radical cystectomy from September 2014 to September 2020. NACT was administered to 16 patients (19%) of the patient who underwent robotic cystectomy and 23 patients (30%) of patients who underwent open cystectomy. Among the patients who underwent robotic surgery, 5 patients (31%) who were administered NACT had complications, compared to 19 (28.7%) out of 66 patients who did not receive neo adjuvant chemotherapy. Of the patients who underwent open cystectomy, 7/23 (30%) who had neo adjuvant chemotherapy had complications as against 12/55 (21%) who underwent primary cystectomy. Exploratory analyses with X2 test did not indicate statically significant difference in relation to neoadjuvant chemotherapy and developing perioperative complications between open and robotic cystectomies.

Conclusion: NACT did not affect postoperative morbidity or mortality. In view of better outcomes with NACT, patients with MIBC should be offered NACT.
A prospective comparative study of Mini-PCNL using Trilogy TM and Thulium fibre laser with suction.

**Introduction:** There has been recent introduction of novel lithotripters and high-power lasers for stone disintegration. With miniaturization of PCNL, there is need of effective disintegration and faster stone-clearance during procedure. This study aimed to evaluate efficiency of Trilogy™ TM and Thulium fibre laser (TFL) in mini-percutaneous nephrolithotomy (mini-PCNL).

**Materials and Methods:** Our prospectively maintained database of patients from June 2019 to July 2020 who had undergone RARC-ICIC at our tertiary care center was analyzed. Patient characteristics, operative time, blood loss, pathological outcomes, and perioperative complications, 30-day readmission rates were analyzed for all the patients.

**Results:** Out of 16 patients who underwent RARC, 10 patients underwent RARC-ICIC by two experienced robotic surgeons. The mean age of the study population was 60.29±9.62 years with a male to female ratio of 7:1. The mean operative time was 365.17±71.17 minutes and the average estimated blood loss was 295.83±165.30 ml. The study population was divided into 3 groups (Group 1: patients 1-16; group 2: patients 17-32; group 3: patients 33-49) for the purpose of this study. There was a marked reduction in the operating times, with a significant difference between the 3 groups (p=.0001). There was no difference between the 3 groups in terms of age, blood loss, hospital stay, complication rates, pathological outcomes, 30-day complication rates, blood transfusion rate, bowel recovery time.

**Conclusion:** With increasing experience, the operative time continues to decrease for RARC-ICIC, with a learning curve of 16 cases. The decreasing operative time, however, does not lead to a decrease in blood loss, hospital stay, complication rates pathological outcomes, 30-day complication rates, blood transfusion rate, bowel recovery time.

**POD 09 – 07**

**Outcome analysis of patients with locally advanced carcinoma prostate undergoing robot assisted radical prostatectomy with or without neoadjuvant androgen deprivation therapy: a retrospective cohort study**

**Introduction and objective:** To analyze the difference in perioperative complications (Clavien Dindo classification), margin positivity rate (MPR) and difference in early (3 months) PSA failure rate between patients getting neoadjuvant androgen deprivation therapy (NA-ADT) and No NA-ADT.

**Material and Methods:** This is Retrospective Cohort Study of 40 patients of locally advanced Ca Prostate (LACP) treated with RARP with ePLND between March 2018 to March 2020. There were 20 patients each in NA-ADT and noNA-ADT groups. LACP was defined as clinical stage T3 or higher at DRE and/or preoperative MRI (tumor extended through the prostatic capsule with or without involvement of the seminal vesicles or adjacent structures).

**Result:** Average blood loss (166.11±65.81 vs 158.33±38.09 ml, P=0.9235) and blood transfusion rate was similar between the two groups. MPR (55% vs 20%, p=0.0240), capsular invasion (55% vs. 50%), and extraprostatic extension (75% vs 55%) were higher in no NA-ADT group. Higher percentage of seminal vesical involvement was seen in NA-ADT group (50% vs 40%). Intraoperative/Post-operative complications had a grade 1 (4, 10%) or grade 3a (2, 5%) complication based on the Clavien Dindo Classification in our study. NA-ADT group had lesser complication rate (10% vs. 25%, p=0.2177), which was statistically non-significant. The mean post-operative PSA levels at three months were comparable (NA-ADT 0.07±0.14 ng/ml, 0.93±2.35 ng/ml in no NA-ADT, p=0.7805).

**Conclusion:** Overall results of this study support that MPR was statistically better in LAPC patients receiving NA-ADT. Complication rates and mean post-operative PSA levels were comparable.
Methods: This is prospective study comparing efficiency and outcomes of TrilogyTM and TFL in mini-PCNL between January 2019-February 2020. Primary objective was to compare stone fragmentation rates, with secondary objectives being stone-free rates and complications.

Results: There were 60 mini-PCNL with suction using either TrilogyTM or TFL energy source. Mean stone size and density were 27.60±10.17mm, 22.04±9.69mm(p=0.05) and 1172.9±313.5HU, 1308.9±333.9HU(p=0.10) for TrilogyTM and TFL respectively. Using 3D doctor imaging software from CT images, mean stone volumes were 3718.9±3038.7mm3 for TrilogyTM and 3425.9±3096.1mm3 for TFL(p=0.77). Using probe-activation time or lasing time, stone-fragmentation rate was 5.98±4.25mm3/sec for TrilogyTM and 3.95±1.00mm3/sec for TFL(p=0.015). Treatment time(puncture to complete clearance) was 32.48±15.39min for TrilogyTM and 28.63±18.56min for TFL(p=0.39). Haemoglobin drop was 1.19±0.76gm/dl for TrilogyTM and 0.99±0.74gm/dl for TFL(p=0.30). TrilogyTM arm had 96.6% complete clearance and TFL had 76.6% in TFL at 48 hours. One patient in TrilogyTM arm required auxiliary RIRS for residual stone. Both arms had complete stone clearance at 1 month follow-up. TrilogyTM arm had 3 Clavien-Dindo grade-II complications while TFL had 2 Clavien-Dindo grade-II complications(UTI requiring antibiotics). There was no blood transfusion in either of arm.

Conclusion: TrilogyTM had significantly better stone fragmentation rate than TFL in managing renal stones. However, stone-free rates and complications were comparable for TrilogyTM and TFL.

POD 10 – 02
A Prospective study to compare the Efficacy of Mirabegron v/s Tamsulosin and Tolterodine in treatment of Double J stent related symptoms
Dr Sharma B, Dr Mandal AK, Dr Khanna R, Dr Sharma K, Dr Kochhar G
Jaipur

due to stone, necrotic tissue, clots or growth and also as a part of procedure like Percutaneous nephrolithotomy (PCNL) and Ureteroscopic lithotripsy (URSL) etc. Majority of patients experience morbidity due to indwelling stents, to relieve these symptoms many drugs are being used but with limited relief of symptoms.

Objective: To compare the efficacy of mirabegron v/s tamsulosin and tolterodine in treatment of ureteral stent related symptoms.

Methods: A total of 63 patients were incorporated in this prospective study and randomised 1:1 in receiving a combination of tamsulosin with tolterodine (group A) and mirabegron (group B). All the patient symptoms were noted by validated IPSS and USSQ scores at baseline and after stent removal.

Results: Out of 63 patients, 32 patients were randomised in group A and 31 in group B. There were 60 mini-PCNL with suction using either TrilogyTM or TFL energy source. Mean stone size and density were 27.60±10.17mm, 22.04±9.69mm(p=0.05) and 1172.9±313.5HU, 1308.9±333.9HU(p=0.10) for TrilogyTM and TFL respectively. Using 3D doctor imaging software from CT images, mean stone volumes were 3718.9±3038.7mm3 for TrilogyTM and 3425.9±3096.1mm3 for TFL(p=0.77). Using probe-activation time or lasing time, stone-fragmentation rate was 5.98±4.25mm3/sec for TrilogyTM and 3.95±1.00mm3/sec for TFL(p=0.015). Treatment time(puncture to complete clearance) was 32.48±15.39min for TrilogyTM and 28.63±18.56min for TFL(p=0.39). Haemoglobin drop was 1.19±0.76gm/dl for TrilogyTM and 0.99±0.74gm/dl for TFL(p=0.30). TrilogyTM arm had 96.6% complete clearance and TFL had 76.6% in TFL at 48 hours. One patient in TrilogyTM arm required auxiliary RIRS for residual stone. Both arms had complete stone clearance at 1 month follow-up. TrilogyTM arm had 3 Clavien-Dindo grade-II complications while TFL had 2 Clavien-Dindo grade-II complications(UTI requiring antibiotics). There was no blood transfusion in either of arm.

Conclusion: TrilogyTM had significantly better stone fragmentation rate than TFL in managing renal stones. However, stone-free rates and complications were comparable for TrilogyTM and TFL.

POD 10 – 03
A Prospective randomised control study on effect of Pre-operative Tranexamic acid in reducing blood loss during PCNL.
Dr Vinod Babu B, Dr Manohar CS, Dr Nagabhushan, Dr Navaneeth Srinidhi, Dr Keshavamurthy Ramaiah
Institute of Nephrourology, Bangalore

PCNL is the standard of care for the management of large upper urinary tract calculi. Hemorrhage is most common complication in PCNL.

Objective: 1.To study efficacy of prophylactic pre-operative tranexamic acid in reducing blood loss and transfusion requirement during and after PCNL.
2.To assess the influence of tranexamic acid with other variables like operative time, hospital stay, post-operative complications and stone free rates.

Methods: The present study included 60 patients ( 30 control and 30 subjects), was conducted in patients diagnosed with renal calculi requiring PCNL from January-June 2021. Patient randomised to two groups Group A: tranexamic acid group received 20mg/kg tranexamic acid at the time of induction. Group B: control group. Hemoglobin/hematocrit estimated 24 hours before and 24 hours after the procedure and units of blood transfused are used to determine the perioperative total blood loss.

Results: The total number of patients were 60, 27(45%) were females and 33(55%) were males, age ranging between 20 - 70 years. Group A male was 16(26.6%), and female was 14(23.3%). The mean with +/- SD of total blood loss in ml in group A was (73.80 +/- 60.1), in group B was (117.24 +/- 87.9) with P value = 0.047. And the mean with SD of hemoglobin drop in group A was (0.45 +/- 0.35g/dl), in group B was (1.00 +/- 0.46 g/dl) with P value = 0.001, both of which are statistically significant.
Conclusion: Tranexamic acid is effective drug in reducing blood loss and transfusion rates in percutaneous nephrolithotomy.

POD 10 – 04
Comparison of Posterior Acoustic shadow width against Echogenic stone size on Ultraosund for estimation of calculus size in Urolithiasis.
Dr Mahesh Joshi, Dr Vinay Tomar
SMS Medical College, Jaipur

Introduction and Objective: The size of calculi in urolithiasis has important implications in management of the patient. Overestimation of stone size occurs on ultrasound in renal calculi. We aim to study distal acoustic shadow (DAS) of calculi on ultrasound as a more accurate measure of stone size in urolithiasis (both renal and ureteric calculi), as compared to direct measurement of stone width.
Method: Thirty patients underwent CT and USG scans within one day of each other. Largest calculus dimension was measured on CT and USG (echogenic calculus and DAS width). DAS width was compared to USG and CT stone sizes.
Results: Average stone size was 10.59 mm on CT, 13.71mm on US, and 11.07mm by DAS. On average, US overestimated stone size by 3.12mm based on stone width and 0.48mm based on DAS width. Shadow measurements decreased misclassification of stones among three clinically relevant size categories (≤5 mm, 5.1-10 mm, >10 mm). US stone size overestimated calculus size in 100% of patients, however, DAS width overestimated calculus size in 73.33%, and underestimated in 26.67%. The difference in mean absolute bias between US stone and shadow measurements was statistically significant (p<0.05).
Conclusion: Distal acoustic shadow width appears to provide a more accurate measure of calculus size in urolithiasis, as opposed to echogenic calculus size on USG which consistently overestimated calculus size (p<0.05). Thus, measurement of DAS width can replace measurement of echogenic stone size for estimation of true calculus size.

POD 10 – 05
NEWS 2 Scoring for Emphysematous Pyelonephritis: A single centre experience
Dr S Alam, Dr AR Bhaskaraprakash, Dr S Hariharasudhan, Dr K Sriram, Dr K Natarajan
SRMC, Chennai

Introduction and Objective: The National Early Warning Score 2 (NEWS 2) is a simple aggregate scoring system in which a score is allocated to certain physiological measurements, already recorded in patients who are admitted in hospitals. Our study focuses on the clinical utility of this scoring system in patients with Emphysematous pyelonephritis (EPN).
Methods: A retrospective analysis of all patients with EPN, who were admitted in our tertiary care referral hospital from Feb 2011 to Jan 2021, was done. Patients were divided into three groups depending on whether they survived with or without intervention. Six parameters were identified and each of them were allocated a score.
Results: Data from 142 patients with EPN were collected and analyzed. Group 1 (n=24); Group 2 (n=111); Group 3 (n=7). All patients in group 1 had normal temperature and a respiratory rate of 12-20/minute. In group 2, oxygen supplementation was needed in 24, temperature was more than 39.1 in 18 and SBP was less than 90 in 7 patients. However, in group 3, all 7 needed oxygen supplementation, 3 of them had a SBP of less than 100 and remaining had SBP of less than 90. Univariate analysis was done using each of the parameters. Abnormal NEWS2 score at initial admission portends a poorer prognosis and warranted immediate attention (p<0.001).
Conclusions: This pragmatic approach emphasises a fair standardization of the severity of the disease based on the parameters studied, directly correlating with the prognosis and ultimate outcome in patients with EPN.

POD 10 – 06
Retrograde Intrarenal surgery vs Mini Percutaneous nephrolithotomy in Renal stones 15-30mm
Dr Hosamani Amit, Dr John P Roy, Dr Joseph Sachin
Medical Trust Hospital, Kochi

Introduction And Objective: Retrospective analysis of RIRS vs Mini PCNL in patients with renal stones of size 15-30 mm in terms of operative time, peri-operative morbidity and mortality, analgesic use, hospital stay, and stone free rates.
Methods: We analysed 118 patients who underwent RIRS or Mini PCNL (65 vs 53) who had renal pelvic or calyceal stones of sizes 15-30mm diagnosed with CT Renal stone survey between 2018 - 2020. All patients who had SIRS with AKI, purulent efflux on passing the guidewire or unaccommodating ureter were stented initially which was 83% in RIRS vs 15% in Mini PCNL. The definitive procedure was performed after 2-4 weeks. All Mini PCNL patients underwent antegrade DJ stenting and 3 patients had nephrostomy drain. Pre-stented RIRS patients underwent ureteric catheter insertion which was removed next day. All the stents were removed after 2-4 weeks.
Results: The mean operative time for both procedures was comparable, the peri-operative morbidity (Clavien Dindo I & II) and hospital stay was high in the PCNL group vs RIRS which was statistically significant (79% vs 36%) and 6±2 days vs 3±1 days respectively. Two patients in the PCNL group succumbed to sepsis. Stone free rates requiring no re-intervention at 2 months in PCNL was 92.5% vs 90% in RIRS.

Conclusion: RIRS is a promising procedure for renal stones 15-30mm with less peri-operative morbidity and mortality with early to work advantage. A gap of at least 2-4 weeks after treating with antibiotics is necessary if pre-op urine culture is positive to avoid peri-operative mortality.

POD 10 – 07
Role of Non-Contrast Computed Tomography in predicting Stone Composition and its correlation with Stone Culture
Dr Singh Jivtesh, Dr RP Sanjay, Dr Adiga Pramod, Dr K Umesh, Dr Keshavamurthy Ramaiah
Institute of Nephro-Urology, Bangalore.

Introduction and Objective: To determine the chemical composition of urinary tract calculi by Non Contrast Computed tomography (NCCT) and its correlation with Stone Culture.

Methods: A total of 101 patients with urinary stones who underwent Ureterorenoscopic Lithotripsy (URSL) or Percutaneous Nephrolithotomy (PCNL) from 2018 to 2020 with complete NCCT scan data were included in the study. Stone Size, Location and Hounsfield unit value were noted. Postoperative stone composition and stone culture were analysed.

Results: Among the included cohort, 3 (2.9%) had vesical calculi, 49 (48.5%) had renal calculi and 49 (48.5%) had ureteric calculi. The mean size and density was 14.83 mm and 976.49 HU (425 - 1700 HU) respectively. According to Stone analysis, Calcium oxalate monohydrate (CaOxM) (n = 44, 43.6%) and calcium oxalate dihydrate (CaOxD) (n = 23, 22.8%) were the most common types. E. Coli (n = 19, 52.8%) was the most common organism on stone culture (n = 36). Mean HU value was 989.13 in CaOxD (1200 - 800), 1195.34 in CaOxM (1700-850), 1150 in Apatite (1200-1100), 752 in Struvite (1200 - 530) and 513 in Uric acid calculi (650-425). Calcium Apamite calculi were most likely to have positive culture. (p=0.00).

Conclusion: Based on NCCT Scan, the composition of a calculi, especially Uric acid or struvite calculi from Ca based calculi can be determined. Also certain calculi more likely to be culture positive and this aids in treatment planning and starting appropriate antibiotics to prevent post op urosepsis.

POD 10 – 08
Safety and Efficacy between Supracostal access and Infracostal access in patients with Renal calculi undergoing PCNL.
Dr Sriramadasu Yashwanth, Dr G Amruth Raj Gowda, Dr R Vijaya Kumar, Dr BR Ravikumar, Dr D Sachin, Dr V Manjunath
JSS Medical College, Mysore

Introduction and Objective: Optimum calculi clearance (staghorn and renal) depends on proper renal access. All types of renal stones cannot be cleared most commonly performed infra-costal access. Advantage of supra-costal access over infra-costal access still persists for selected group of patients. To gain further insight, a prospective study was conducted to compare supra-costal and infra-costal access in terms of stone clearance, surgical ease and complications.

Methods: A total of 120 patients with renal stones (Staghorn and other renal calculi) were taken for PCNL at our Tertiary care between January 2019 to May 2021. Sixty four underwent Supra-costal, while 55 underwent infracostal access. Both were compared on various parameters like duration of surgery, intraoperative blood loss, Rate of complete stone clearance, Hb drop, hospital stay and postoperative complications.

Results: Our study success rate was 84% for supra-costal access, 76% for infra-costal access. Secondary puncture rate was 17% in supra-costal access, 26% in infra-costal access. There was no statistical significant difference noted in terms of mean operative time and duration of inpatient stay. In terms of complications blood transfusions were more in infra-costal approach. Most feared pulmonary complications (hydrothorax, hemothorax etc) have not happened in supra-costal access.

Conclusion: Supra-costal access PCNL is safe and effective option for selected group of renal calculi patients when judiciously used and can offer better calculi clearance with less rate of secondary punctures, and less need for ESWL.

POD 10 – 09
Study of Ureteric diameter in indian Population and its clinical implications
Dr Abhijit Samal, Dr V S Kundargi, Dr Santosh Patil, Dr B S Patil, Dr S B Patil
Sri B M Patil Medical College, Vijaywada

Background: Assessment of normal ureteric diameter is essential for the management of obstructive pathologies. CT urography is the primary imaging modality for evaluating the urinary tract anatomy and associated
Introduction and Objectives: Double J (DJ) stent is usually placed in ureter during percutaneous nephrolithotomy (PCNL) and ureteroscopy/lithotripsy (URSL). There are complications of DJ stents such as urinary symptoms, urinary tract infection. The objective of this study is to compare the effect of No versus 7 days oral antibiotics for DJ stented patient in terms of urinary tract infection (UTI) symptoms, urine culture/sensitivity, DJ stent culture/sensitivity.

Methods: All patient undergoing PCNL+DJ stenting/URSL+ DJ stenting, Preoperative urine culture positive, Staghorn calculi, Immunocompromized patients were excluded. Patients were randomized into two groups. Group A, no oral antibiotics was given at the time of discharge after 3 days of iv antibiotic. Group B, 7 days of oral antibiotic (levofloxicin) was given at the time of discharge after 3 days of iv antibiotic. Patients were followed up and outcomes were assessed in the form of UTI symptoms, urine culture and sensitivity at 1, 3, and 4 weeks and DJ stent culture and sensitivity on removal at 3 weeks.

Results: Ninety one patients were enrolled in the study (46 in group A and 45 in group B). There were no significant differences in UTI symptoms, urine culture/sensitivity at 1, 3 and 4 weeks and also DJ stent culture and sensitivity on removal at 3 weeks between the two groups (P value > 0.05, Fisher Exact test).

Conclusion: Prescribing oral antibiotics on discharge has no added benefit in these patients and should be avoided to prevent antibiotic resistance.

Introduction and Objective: Urinary tuberculosis (TB) has a variety of clinical manifestations and is a diagnostic challenge for urologists. Delayed treatment can lead to loss of renal function and anatomical distortion. In this study, we analysed the relationship between the treatment timing and outcomes in patients with urinary TB.

Methods: We performed a retrospective study of all the patients presenting to our institute with urinary TB diagnosed for the first time, from 2019 to 2021 (2 years), and analysed the patients’ symptoms, diagnostic methods, imaging studies, time to diagnosis, treatment methods, and follow-up.

Results: 100 patients (median age: 40 years) had urinary TB, of whom 88 had hydronephrosis and hydroureter. In 21, bilateral renal involvement was noted. The median duration from symptom onset to anti-TB treatment was 2 months. There was a significant difference between symptom to treatment time and post-treatment change in renal function (r = 0.103, P = 0.05); and the symptom-to-treatment time was linearly associated with pre- and post-treatment hydronephrosis grade (r = 0.667, P = 0.03). In multivariate analysis, the symptom-to-treatment time was found to be an independent predictor of improvement in hydronephrosis and was associated with renal function improvement. Of 88 patients with upper urinary tract drainage, hydronephrosis improved in 76 and was stable in 12 patients. Of 12 patients without drainage, 4 experienced renal loss.

Conclusion: Urinary TB has vague clinical manifestations and is prone to delayed diagnosis and treatment. Early diagnosis and prompt urinary drainage prevent renal loss in most patients.
Stone Fragmentation is safe and improve Renal function in Chronic Kidney disease patients: Prospective outcome with a minimum follow up of 6 months

Dr Varthe Venkatamahesh Naik, Dr K Saravanar, Dr Ezhil Sundhar, Dr P R Saravavan, Dr Harry Santhaselan
Madras Medical College, Chennai,

Urolithiasis impairs renal function as a consequence of obstruction or infection from stones, parenchymal damage from primary condition, or surgical intervention for stone disease. This study was conducted with the aim of assessing the available treatment modalities with respect to clearance rates, complication rates, and change in renal function in patients of CKD adopting a patient specific approach. A total of 60 patients with urolithiasis were enrolled in our study age ranged from 25 to 75 years. Majority were male (70%) and had unilateral involvement (80%). The mean preoperative S. Hb, urea, creatinine, and total leukocyte count (TLC) were 9.9 ± 0.54 g%, 74.13 ± 24.09 mg/dl, 5.21 ± 2.95 mg/dl, and 9.67 ± 2.21 thousands/cumm, respectively. PCNL and URSL were the most common procedures used in 32 (53%) and 16(26%) patients respectively. In addition, in 2 (3%) patients, PCNL with URSL, in 6(10%) Eswl was used. The other procedures mentioned above were done in 4(6.6%) patients. The clearance rate for different techniques ranged from 50% (PCNL with URSL) to 87.5% (URSL alone). The overall clearance rate was 78.3%. Fever (25%) and deranged renal function test requiring haemodialysis (16%) were the most common postoperative complications. Postoperatively, a significant decline in the mean Hb, serum (S) urea, S. creatinine and improvement in eGFR was observed. During follow up, S. creatinine levels showed consistent decline. Auxiliary procedures were needed in ten (16.6%) cases. There were four (6.6%) mortalities. The selection of appropriate strategy results in good outcome and minimum complications.

POD 11 – 04
Effect of Percutaneous Nephrolithotomy on Renal function in patients with chronic Kidney disease

Dr Hari Shankar Singh, Dr Sandeep Kumar, Dr Shivanand Prakash, Dr Pradeep Nayak, Dr Sameer Trivedi, Dr Lalit Kumar
IMS, BHU, VARANASI

Introduction: Prevalence of urolithiasis in patients with chronic kidney disease (CKD) is 1.7% to 18%. PCNL is effective, minimizes recurrence, decreases renal damage and currently considered an attractive option. In this study, we evaluated effect of PCNL on renal function in patients with CKD by comparing the GFR in the pre-operative and post-operative period.

Material and Methods: Total 146 patients with renal calculi and CKD 3 who underwent PCNL at a tertiary care centre between January 2014 and December 2020 were included. Preoperative CBC, RFT, coagulation profile, urinalysis and culture, NCCT abdomen were done. Renal function tests and GFR estimation was obtained on POD 3, day 30, 3 months. Median and mean values were calculated for nonparametric and parametric test results respectively.

Results: Mean age was 53.6 years. The overall success rate was 94.5% (n=138). There was significant fall in serum creatinine from preop mean of 1.93 to 1.75 on day 3 and 1.72 at 3 months (p<0.05). Significant improvement in GFR from preop means 41.2 to 50.2 on day 3 and 51.7 at 3 months.

Discussion: The management of nephrolithiasis in CKD plays an important role in improving renal function and preventing the need for renal replacement therapy. PCNL is safely applied for a long time in the treatment of patients of nephrolithiasis and co morbidities.

Conclusion: All efforts should be directed towards ensuring a stone free status in patients with nephrolithiasis associated CKD because stone clearance showed an overall improvement in GFR.

POD 11 – 05
Effect of Tamsulosin vs Tadalafil on Ureteric and Renal stone clearance in patients receiving Extracorporeal Shock wave lithotripsy - A Randomized controlled trial.

Dr Sadanala ME, Dr Dangi AD, Dr Balavendra A, Dr Berry JC, Dr Mukha RP, Dr Devasia A, Dr Kumar S
CMC, Vellore

Introduction and Objective: We aimed to ascertain the differences in effectiveness between Tamsulosin and low-dose Tadalafil when used as an adjunct to extra-corporeal shockwave lithotripsy (SWL).

Methods: This is a triple blinded, prospective, randomized control, single centre study. Total of 244 patients with solitary renal or ureteric calculus measuring 5 to 15 mm were randomized to 2 groups to receive either 0.4mg Tamsulosin or 5mg Tadalafil for 30 days or till stone clearance, whichever was earlier.

Results: Baseline characteristics were well matched between groups. No difference in the primary outcome i.e., stone expulsion rate at 30 days (Tamsulosin vs Tadalafil; 81% vs 80% p 0.728) was seen. Similarly, there were no significant differences in the secondary outcomes i.e., number of days to expulsion (Tamsulosin vs Tadalafil; IQR 12 (7-17) vs 12 (8-18) p 0.676), incidence of pain requiring oral (Tamsulosin vs Tadalafil; 4% vs 6% p 0.504) or parenteral analgesics (Tamsulosin vs Tadalafil; 3.2% vs 0.8% p 0.175), incidence of steinstrasse (Tamsulosin vs Tadalafil; 13% vs 15% p 0.335) and effectiveness quotient (Tamsulosin vs Tadalafil; 34% vs 35%).
Four patients discontinued the drug due to headache and myalgia in the Tadalafil group. One serious adverse event with intractable vomiting requiring hospital admission in the Tadalafil group, was later reported as not related to drugs by appropriate investigative boards.

Conclusions: Low-dose Tadalafil has equivalent outcomes when compared to Tamsulosin when used as an adjunct to SWL. Tadalafil has greater propensity and lower tolerability to adverse drug reactions.

POD -11-06
Factors predicting Ureteral stent related symptoms: A study to construct a scoring system (S4 score) for prediction
Dr Sharma G, Dr Prakash JVS, Dr Thiruvan PV, Dr Vetrichandar S, Dr Arasi KV, Dr Paranjothi AK, Dr Natarajan V
Stanley Medical College, Chennai

Introduction and Objective: It is a known fact that Endourological procedures frequently require the placement of Double J ureteral stent. Stent ensures patency and drainage but that the same time it can be a source of bothersome stent related symptoms increasing the morbidity. The factors which result in stent symptoms is an area of debate and intriguing to everyone. We aim to find out the predictive factors which lead to stent symptoms after uncomplicated URS procedures. Further we aim to establish a scoring system (Stanley Stent Symptom Score, S4) which can help us predict and take necessary action to minimise them.

Methods: Our study includes 153 URS cases where we studied the demographic data and correlated various factors with stent symptoms. All patients completed a questionnaire to evaluate the symptoms in immediate post operative period and one week after the procedure and statistical data was evaluated using SPSS 24 Statistics.

Results: In our study we found that stent related symptoms correlated statistically with factors such as BMI, stone size, with distal curl, distal end crossing midline to name a few and these factors could predict the occurrence of stent related symptoms. Based on these we have constructed a stent scoring system (S4 Score) which predicts the possibility of developing stent related symptoms.

Conclusion: The selection and placement of Ureteral stent while keeping in mind the various predictors of stent related symptoms can help a long way in reducing the morbidity related to a quite common urological procedure used worldwide.

POD 11 – 07
A comparative study of safety of renal access in retrograde intrarenal surgery with and without fluoroscopy
Dr Ram Prasad Ch, Dr V Rajagopal, Urology, Dr Sharma DVSLN, Dr Daxay Lakhani, Dr Sirish Bharadwaj
Apollo Hospital, Hyderabad

Objectives: Primary objective is to assess the safety of renal access with the technique of placement of ureteral access sheath undervision.

Methods: A prospective observational comparative study was done at Apollo hospital, Hyderabad between May 2018 and May 2020.A total of 124 patients were included in the study. GroupA (n=62), Fluoroscopy free technique and GroupB (n=62) Fluoroscopy technique. Patients with single renal calculus of size <2cm were included in the study. All cases had preoperative CT KUB plain with detailing of calyces. All cases were pre stented. Fluoroscopy free technique is performed in GroupA. Standard RIRS performed in Group B. Stone free rate was defined as CIRF<4mm.

Results: Mean age in groupA and groupB was 39.64 ± 11.28 yrs and 40.75 ± 11.71 yrs respectively. Mean stone size in groupA and groupB was 14.58 Â± 3.02 mm and 14.76 Â± 2.94 mm respectively. Mean operative time in groupA and groupB was 54.8 Â± 13.84 min and 60.5 Â± 12.23 min (p=0.016) respectively. Mean post operative hospitalisation stay in groupA and groupB was 1.09 Â± 0.39 days and 1.11 Â± 0.41 days respectively. Incidence of ureteric injury in groupA and groupB was (Grade 1) was 9.7% and 14.5% in(p=0.409) respectively. Incidence of haematuria (Clavien grade 1) was 4.8% (n=3) in groupA and 6.5% (n=4) in groupB (p=0.697). Incidence of postoperative fever (Clavien Grade II) was 4.8% (n=3) in groupA and 6.5% (n=4) in groupB (p=0.397). SFR at the end of 1 month was 93.5% (n=58) in groupA and 90.32% (n=56) in groupB, p=0.51.

Conclusion: Renal access in fluoroscopy free technique is safe and its outcomes are comparable with standard RIRS

POD 11 – 08
Challenges and Gender based differences for Women in the Indian Urological Workforce
Dr Shruti Pandit, Dr P Venugopal, Dr Arun Chawla, Dr Padmaraj Hegde, Dr Akshay Kriplani
KMC, Manipal
Introduction: The rise of Women in surgical branches is not reflected in Urology with only 1% of USI members being women. The objective of this study is to explore the personal and professional challenges, practice barriers and level of satisfaction among female urologists in India.

Methods: A 25-item questionnaire with respect to professional and personal challenges, workplace discrimination and family satisfaction was distributed electronically to women urologists across India.

Results: With a response rate of 68%, majority had less than 5-years of experience (60.6%) of which 30.3% were residents, reflective of a recent surge in women joining Urology. Majority (57.7%) chose to subspecialize, commonly in female-urology possibly due to preformed norms, 72.7% stating to have being encouraged into this sub-specialty. Work-place gender-discrimination was reported by 54.5% commonly from patients & consultants. Residency coincides with optimal timing for childbearing, 68.2% in our study, leading to additional domestic labour causing a stress gap. The work environment led to pregnancy related complications in 9.1% of women. These obstacles led to 30.3% women reporting that their personal life had compromised their career. Professional dissatisfaction was reported by 60.1% women, common causes being less OT time than male counterparts & lack of mentorship. Given a chance, 78.7% would choose Urology again & 66.7% would encourage their daughter to pursue a career in Urology.

Conclusion: Challenges for women include gender-discrimination, lack of mentorship, pregnancy related complications and compromised career due to family responsibilities. Identifying and addressing these issues should be urged to maintain an equilibrium.

POD 12 – 01
A Tertiary Care Centre Experience of Vesico-vaginal Fistula Repair: Factors Predicting Success, Quality of Life / Sexual Function in VVF
Dr Harish Pal, Prof S Trivedi, Dr Lalit Kumar, Dr Yashasvi Singh
BHU Varanasi

Introduction: Vesicovaginal fistula is an abnormal fistulous tract extending between the bladder and the vagina that allows the continuous involuntary discharge of urine into the vaginal vault. They affect physical, mental, social and sexual life of the patients. This study was conducted to evaluate the factors predicting success, quality of life / sexual function in VVF.

Methods: We reviewed retrospectively the case-notes of 300 consecutive patients treated between January 2011 and December 2020. Patient underwent repair using transabdominal technique. Objective clinical parameters were analyzed, subjective outcomes were recorded prospectively before surgery and at the 6-month follow-up (whereever possible) examination with the use of the female sexual function index to evaluate sexual function and the visual analog scale to measure general disturbance by the fistula.

Results: All patients were tertiary referrals, 32 after failed local repairs. 12 were unsalvageable and had a supravesical diversion. There were 288 repairs done by specialist surgeon. The fistula was closed in 264 patients (91.67%); 24 VVF required a second procedure and two VVF a third procedure. In one VVF (one attempt) and one UVF (three attempts) the procedure failed The major determinants of success were fistula size (<3 cm; P=0.02), re-do surgery, previous malignancy , previous radiotherapy. Out of 201 sexually active female sexual function improved in 197 patients, and overall disturbance by the fistula was reduced with operative techniques.

Conclusion: Fistula repair improves sexual function and quality of life with no difference attributable to surgical route

POD 12 - 02
Influence of the short-term intake of Mirabegron and Solifenacin on cognitive function in Combination Compared with Monotherapy in women with Overactive Bladder: Prospective, Randomized Study
Dr Ershad Hussain Galeti, Dr Vedamurthy Reddy P, Dr Bhargava Reddy K V
Narayana Medical College, Nellore

Background and objective: Combination of mirabegron and the solifenacin may improve efficacy in the treatment of OAB while reducing the anti-cholinergic side effects. The Objective of this study is to evaluate the influence of the short term intake of combination (solifenacin 5 mg and mirabegron 50 mg) versus solifenacin 10 mg and mirabegron 50mg on cognitive function in women with overactive bladder.

Methods: This is a prospective randomized study of 120 Patients with OAB who attended the Urology OPD over a period of 12 months. The women were randomly assigned to 3 groups: Group A, taking solifenacin 10 mg per day. Group B, taking mirabegron 50 mg per day, and group C, taking solifenacin and mirabegron 5mg and 50mg per day, respectively. 40 patients were assigned in each group.OAB diagnosis was assessed clinically with International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF) and cognitive function with Mini-Mental State Examination(MMSE) scale.

Results: There was change in mean MMSE score apparent in Group A at week 12(P<0.05) especially in elderly. After 12 weeks, a significant reduction in the mean number/24 h of voids and urgent micturition episodes/24h was observed in all groups.7 Patients (17.5%) in group A, 8 Patients (20%) in group B, 3 Patients (7.5%) in group C reported constipation and dry mouth respectively. The (ICIQ-SF) did not demonstrate significant differences(P>0.05).
Conclusion: Mirabegron and solifenacin combined therapy showed a superiority over solifenacin and mirabegron monotherapy, and maybe an alternative for those who experience resistance to solifenacin and mirabegron monotherapy because of adverse effects.

POD 12 – 03
Female Voiding Dysfunction: Survey of Practice patterns amongst Indian Urologists
Dr Patel S, Dr Iyer S, Dr Prasad V, Dr Yadav S, Dr Kumar N, Dr Vasudeva P
VMMC & Safdarjung, New Delhi

Introduction: We report the findings of a survey conducted to ascertain practice patterns of members of the Urological Society of India (USI) with regard to diagnosis and management of female voiding dysfunction (FVD).

Methods: A 19-question survey was conducted on the SurveyMonkey® platform from December 17, 2019 to January 9, 2020. Questions included demographic details of respondents and policies regarding evaluation and treatment of FVD.

Results: 1278 of the 2649 qualified urologists of USI responded (48.2%). 1090 valid responses were included in the final analysis. While the majority of the respondents opted to check post void residual urine and 2/3rd ordered uroflowmetry in patients presenting with history of poor flow and/or incomplete emptying of urine, 38.6% and 45.7% of the respondents did not consider invasive urodynamics and cystoscopy, respectively, to be appropriate investigations in these patients. 29.6% were comfortable in dilating the urethra of female patients based on obstructive symptoms alone. 60% of respondents had performed at least one of the specialised surgical procedures for FVD.

Conclusion: Most Indian urologists treat FVD with 60% having at least some experience with surgical interventions. However, this survey revealed considerable heterogeneity and identified critical lacunae in the practice of FVD by Indian urologists. Inappropriate evaluation and management practices are surprisingly common. Findings of this survey could be useful in designing appropriate training programs for practitioners.

POD 12 – 04
Management of Symptomatic Ureteral calculi in Pregnancy
Dr Varthe Venkatamahesh Naik, Dr K Saravanan, Dr Ezhil Sundhar, Dr PR Saravavan, Dr Harry Santhaselan
Madras Medical College, Chennai

Urolithiasis during pregnancy is an important health concern that can affect maternal and foetal health. If left untreated, it may lead to urinary stasis, causing obstetric complications, such as preterm delivery and spontaneous abortion associated with urinary tract infection and pyelonephritis in pregnant women. In this study we present our experience in the management of symptomatic ureteral calculi during pregnancy. Twenty five pregnant women, aged between 20 and 35 years presented to the obstetric and urology departments with renal colic (19 cases, 76%) , fever and renal pain (6 cases, 24%); suggesting ureteric stones. The diagnosis was established by ultrasonography. Outpatient follow-up consisted of clinical assessment and abdominal ultrasonography. Follow up by X-ray of the kidneys, ureter, and bladder (KUB) was done in the postpartum period. Double J (DJ) stent was inserted in six women (24%) with persistent fever followed by extracorporeal shock wave lithotripsy (ESWL) one month postpartum. Per cutaneous nephrostomy under ultrasound guidance was performed for 16 women (distal ureteric stone in 10, middle ureter in 4, and upper ureteric stone in 2). Stone free rate was 100%. No urologic, anaesthetic, or obstetric complications were encountered. Ureteroscopy, laser lithotripsy, DJ insertion and percutaneous nephrostomy under ultrasound guidance could be a definitive and safe option for the treatment of obstructive ureteric stones during pregnancy.

POD 12 – 05
Urodynamic characteristics of adult men with mixed detrusor overactivity with detrusor underactivity: a database analysis
Dr D Sirish Bharadwaj, Dr Sanjay Sinha
Apollo Hospital, Hyderabad

Aims: To examine the urodynamics characteristics of adult men with mixed detrusor overactivity with detrusor underactivity.

Methods: Data included adult men who underwent urodynamics for refractory non-neurogenic lower tract symptoms between 2011 and 2020. International Continence Society indices for obstruction (bladder outlet obstruction index [BOOI] ≥40) and underactivity (bladder contractility index [BCI] <100) were calculated. Nonparametric tests were applied as applicable using SPSS 25.0 (Abbreviations: Detrusor overactivity DO, detrusor underactivity DU, mixed detrusor overactivity with detrusor underactivity DODU).

Results: A total 199 men (12.5%; median age 62 years, range 19-85 years) out of 1596 who underwent urodynamics had DODU. Men with DODU were significantly older than men with DU without DO as well as men without UA being 62, 48 and 52 years, respectively (p<0.001). Peak detrusor pressure during involuntary detrusor contraction was lower in men with DODU as compared with men with DU without DU [median 40cm H20,
Men with DODU were more likely to be obstructed as compared with those with UA alone but less likely than those without UA (BOOI >40 in 38.7%, 23.6% and 68.8%, respectively; p<0.001). Detrusor contractility was significantly better in men with DODU as compared with those having DU alone although much lower than those without DU (Median BCI 81, 75 and 135, respectively; p<0.001).

Conclusions: Men with DODU show unique urodynamic features that differentiate their storage phase from men with DO without UA as well as their voiding phase from men with UA alone. These findings might have clinical implications for management.

POD 12 – 06
Videourodynamic in the evaluation and management of lower urinary tract symptoms in young adult men less than 40 years.
Dr Gurpremjit Singh, Dr A Mittal, Dr VK Panwar, Dr AK Mandal, Dr S Kumar, Dr SC Navriya
AllIMS Rishikesh

Introduction: The prevalence of lower urinary tract symptoms (LUTS) in young men is 28%. A careful clinical evaluation is strongly recommended but it is seldom enough to make a working diagnosis in young men. Urodynamics gives a direct assessment of the patient’s lower urinary tract symptoms by reproducing the patient’s symptoms.

Materials and methods: This was a prospective study where video urodynamic studies (VUDS) of 20 men, 40 years of age or less with LUTS was performed between January 2020 and June 2021. The objectives were to study the etiology of LUTS in young men and to study the success rate in the form of a decrease in IPSS score and post-void residue wherever applicable. Patients with infective etiology, stricture disease, and malignancy were excluded.

Results: The mean age of patients was 32 years. The most common symptom was voiding LUTS. The most common diagnosis was primary bladder neck obstruction (PBNO) in eight patients, Detrusor underactivity in five patients, and Dysfunctional voiding in three patients. Bladder neck incision was performed in four patients among PBNO and four patients had improvement of symptoms on alpha-blockers. Among DU patients 2 patients had improvement on baclofen and 3 patients had been started in clean intermittent catheterization.

Conclusion: A urodynamic diagnosis is possible in most young men who undergo the study. Videourodynamic helps in the meaningful assessment of LUTS in young men and can be a part of the workup of LUTS if no other obvious cause is found.

POD 13 – 01
A Comparative study between Mirabegron and Tamsulosin for Ureteric stent related morbidity
Dr Atif Abdullah C, Dr Gupta Yogendra Basoo, Dr Ananda Kumar I, Dr Ramesh G, Dr Senthil Kumar S, Dr Sudhakaran S, Dr Srikala Prasad T
Govt Chengalpattu medical college

Introduction and Objective: Alpha adrenergic blockers like tamsulosin are used in the treatment of stent related symptoms. In the recent past, mirabegron is being evaluated for the same. The aim of this study was to compare the effect of mirabegron and tamsulosin on ureteric stent related morbidity.

Methods: It was a prospective randomized control study which included patients undergoing uncomplicated ureteroscopic lithotripsy with DJ stenting for ureteric stones. Eighty patients were randomized to mirabegron and tamsulosin group by block randomization (40 in each group). Symptoms were assessed using ureteral stent symptom questionnaire (USSQ), IPSS questionnaire and visual analog pain scale.

Results: The USSQ urinary symptom score (25.5 vs 33.45 P= 0.0001) and body pain score (16.15 vs 26.02 P= 0.0001) were lower and statistically significant in mirabegron group. However, general health score (17.0 vs 17.28 P= 0.62) and work performance score (7.6 vs 8.0 P= 0.28) didn’t show significant difference. Total IPSS score for mirabegron group was lower (6.12 vs 7.02; P = 0.021). Voiding symptom score and visual analog pain score didn’t vary significantly, however storage symptom score was significantly lower in mirabegron group (3.98 vs 5.1; P = 0.001) and had a better quality of life score (2.18 vs 3; P = 0.0001).

Conclusion: Mirabegron has shown to reduce urinary symptoms associated with ureteric stents and result in better quality of life, when compared with tamsulosin. However, large scale studies may be required to further evaluate the beneficial effects of mirabegron in stent related morbidity.

POD 13 – 02
Emphysematous Pyelonephritis: Management and predictors of Clinical outcomes
Dr Sudhindra Jayasimha, Dr Marimuthu S, Dr Lenin A, Dr Shyamkumar NK, Dr Chandrasingh J, Dr Santosh Kumar
CMC, Vellore

coronary artery disease (CAD) and low eGFR at presentation, predicted the need for ICU care. No clinical, laboratory or radiological parameter was associated with 30-day readmission. Traditional prognostic variables like
thrombocytopenia, shock, altered sensorium, dialysis, radiological class and qSOFA, were not predictive of outcome.

Conclusions: Emphysematous pyelonephritis can be successfully managed with conservative methods. Organ dysfunction at presentation is associated with mortality while prior intervention for CAD and low eGFR predict need for ICU admission.

POD 13 – 03
Evaluation of demographic characteristics and characteristics of bacterial colonization of Ureteral DJ Stents - A Prospective Study
Dr Yogendra Basoo Gupta, Dr Atif Abdullah C, Dr Ananda Kumar I, Dr Ramesh G, Dr Senthil Kumar S, Dr Sudhakaran S, Dr Prasad T Srikala
Govt Chengalpattu Medical College

Introduction and Objective: The bacterial flora and predominant bacteria colonized on ureteral stents can vary in different institutions. Knowledge of growing microorganism on stent may help us in deciding postoperative antibacterial therapy in high risk patients with indwelling DJ stents.

Methods: From September 2020 to June 2021, 100 consecutive patients following endourological procedures with preprocedure sterile urine were included in this prospective study. Pre-operative non sterile urine culture and indwelling stent duration <2 weeks were excluded. 26cm, closed tip DJstent made of polyurethane was used. Urine culture and sensitivity was done on the same day before stent removal. Removed stents were sent for bacteriological study and susceptibility to a panel of 7 antibiotics, commonly used at our institute.

Results: 57 male and 43 female were included in the study. The mean age was 47.8 years (range 23-62 years). The mean indwelling stent duration was 68.5 days (range 18-130). 24 stents were culture positive. Both stent and urine culture was positive in 13 cases. However 11 cases showing positive stent culture were negative for urine culture. Escherichia coli was the most commonly isolated organism from the stents (17) followed by Staphylococcus (3), Enterococcus (3) and Pseudomonas (1). Most of the isolates were sensitive to the tested antibiotics with most sensitive to Meropenam, followed by Piperacillin-Tazobactum, Amikacin, Norfloxacine and Ampicillin. In our study most of the isolates were resistant to Ceftriaxone and Cefotaxime.

Conclusions: An indwelling ureteral DJ stent carries a significant risk of bacteriuria and stent colonization. Negative urine culture result does not always rule out positive stent culture.

POD 13 – 04
Minimally invasive treatment options for renal preservation in emphysematous pyelonephritis and predicting outcomes based on risk factors: our experience
Dr Varun G Huilgol, Dr Manasa T, Dr Puvvada Sree, Dr Prasad Mylarappa, Dr Ramesh D Ramiah Medical College, Bangalore.

Introduction and Objective: Emphysematous pyelonephritis(EPN) is a urologic emergency defined as a necrotizing life-threatening infection of renal parenchyma caused by gas-forming bacteria. Although a number of case series have been published in literature, there is a wide variation in the risk factor assessment and reported mortality primarily due to the small sample size. Hence, we aimed to evaluate the outcomes of EPN based on the risk factors associated. We also looked into various treatment options offered based on the grade and severity of EPN.

Methods: All patients diagnosed with emphysematous pyelonephritis between 1 January 2016 to 31 December 2020 were assessed retrospectively. Demographics, clinicoradiological and laboratory findings were recorded on admission, 1st week and 4th week. Based on the management and survival, patients were classified into 4 groups; Group 1: Medical management and survived, Group 2: DJ stenting ± PCD and survived, Group 3: Nephrectomy and survived and Group 4: Patients who succumbed to death. The risk factors and outcomes were evaluated.

Results: A total of 130 patients were included in the study. Median age was 61 years. Diabetes mellitus was present in 112(86.2%). Group 1 included 10.76% (14) patients, group 2:79.23%(103), group 3:10%(13), group 4:3.07% (4) patients respectively. Type 2 EPN was the most common radiological presentation seen in 62.3%. Urine Culture showed 30(23.1%)positive for E.coli,9(6.9%) for enterococcus,28(21.5%) for klebsiella and 9(6.9%) having poly microbial count.Age, diabetes, shock and sepsis, low platelet counts, high CT grading were significantly associated with mortality (p<0.01).

Conclusions: With high clinical suspicion, early initiation of therapy and timely intervention in the form of urinary drainage, EPN is potentially treatable, with better short and long-term renal outcomes resulting in a low mortality rate.

POD 13 – 05
Role of Mirabegron for Ureteral Stent Related Symptoms: A prospective, single centre study
Dr Nirav Mehta, Dr Nachiket Vyas, Dr Shivam Priyadarshi, Dr Govind Sharma
SMS, Jaipur
Introduction: Ureteral stents are widely used for the management of renal and ureteric stone (post-operatively) and upper urinary tract obstruction. Approximately 16% to 80% of patients with an indwelling ureteral stent suffer from stent-related symptoms (SRSs). Aim of our study was to measure efficacy of mirabegron 50 mg once daily for SRSs after DJ-stenting.

Methods: Of total 135 patients after excluding ineligible patients 80 patients underwent DJ-stenting from June 2020 to April 2021 in our institution. Patients were discharged with ureteral stent symptoms questionnaire (USSQ) form and asked to fill if SRSs developed and followed up at 7th post-operative day. If patient developed SRSs, mirabegron 50mg once daily was given for next 21 days. Patients were asked to fill another USSQ form after 3 weeks before stent removal. The USSQ score before and after mirabegron was compared.

Results: After using mirabegron, mean urinary symptoms score was decreased from 24.7±1.8 to 17.8±2.9 (p < 0.001), mean body pain score was decreased from 15.0±2.4 to 10.1±5.6 (p < 0.001), mean work performance score was decreased from 7.5±0.8 to 5.0±1.5 (p < 0.01), mean general health score decreased from 8.5±1.4 to 6.3±1.3 (p < 0.001), mean sexual matters score decreased from 3.9±3.4 to 2.5±1.5 (p < 0.01), additional problem score decreased from 7.6±2.6 to 5.3±1.8 (p < 0.0001) and overall quality of life score decreased from 4.9±1.9 to 3.9±1.7 (p < 0.001).

Conclusion: Mirabegron 50mg once daily is clinically as well as statistically effective for patients having post-stenting stent related symptoms.

POD 13 – 06
Survey among urologists on web-based learning: Are we ready for transition to the COVID-19 era?
Dr Karthikeyan VS, Dr Ashwin Mallya, Dr Karthickeyan N, Dr Manish Kumar, Dr Sivanandam SE, Dr Karthikeyan A
Sri Narayani Hospital and Research Centre, Vellore

Introduction: During the Corona virus 19 (COVID-19) pandemic, there has been an explosive raise in the number of webinars. We sought to identify the ideas, concerns and expectations of the Urology fraternity regarding web-based learning (WBL).

Methods: This was conducted as an online survey using SurveyMonkey platform. Questions included demographic and practice related details, current position and type of practice, approach towards WBL and its acceptance, knowledge, attitude and practices about online meetings and social media (SoMe) platforms, ideas and expectations from future WBL sessions, topics where the urologists feel they need more learning and additional comments.

Results: A total of 173 urologists participated in this survey with majority (51.5%) in the 35-44 year age group, 47% participants were in their early (<5 years) phase of their career. About 37%, felt WBL will definitely improve gaps in clinical knowledge, 89% wanted to allot time for WBL post COVID-19 and 65% felt that WBL events should be regulated. Urologists in group practice and institutional setup were ready to attend more WBL sessions (p = 0.002 compared to those in individual practice. The 6-10 PM time slot was favored by majority (61.3%) of urologists with a 1-week notice (52%) for planning their schedule.

Conclusions: The COVID-19 pandemic has paved way for the increased uptake of WBL for dissemination of clinical knowledge. Feedback and usage of online analytics could make WBL a powerful tool.

POD 14 – 01
Comparison of efficacy among different antibiotic prophylaxis in patient undergoing office cystoscopy in a single institution
Dr Mollah Washim, Dr Alam Tahzeeb, Dr Dey Sumanta, Dr Patawari Piyush Kumar, Dr Mondal Soumendranath, Dr Sharma Pramod Kumar
Calcutta National Medical College & Hospital, Kolkata

Introduction And Objectives: Cystoscopy commonly used in our urological field could lead to UTI which could increase costs to the health system, the resistance of microorganisms and morbidity to the patient .The objective is to compare the efficacy of single dose injectable amikacin with single dose oral levofloxacin with placebo as prophylaxis prior to cystoscopy patients in decreasing the post procedure symptomatic urinary tract infection.

Methods: A prospective observational study in patients older than 18 who are undergoing office cystoscopy from February 2021. The intervention was tablet Levofloxacin 500 mg single dose vs Injectable Amikacin 500mg single intra muscular injection vs tablet calcium 500 mg as placebo single dose given 1 hour prior to procedure. The primary outcome was measured by presence of urinary tract infection at 5-10 days after the procedure by presence of irritating symptoms of urinary tract with positive urine culture of 10^5 CFU/mL for a microorganism in a midstream sample of urine, with or without systemic symptoms.
Results: Hundred patients in each study arm will be taken in the trial. The incidence of UTI in the group with levofloxacin was 0.7% and with injection amikacin was 0.5% and in placebo group was 3% and no significant difference were found till now (p=0.15).

Conclusions: No significant differences were found in the use of either injectable or oral prophylactic antibiotic compared to placebo to reduce the incidence of UTI in patients who undergo cystoscopy as an outpatient procedure.

POD 14 – 02
COVID 19 and Renal Mucormycosis: Analysis of Eight cases
Dr Baiq Gaurav, Dr Madduri Vijay Kumar Sarma, Dr Sandhu Arjun Singh, Dr Choudhary Gautam Ram, Dr Singh Mahendra, Dr Jena Rahul
AIIMS, Jodhpur

Introduction and objective: Immune dysregulation in COVID 19, steroids prescribed for cytokine storm of COVID 19 & comorbid conditions, all combined may lead to an immunocompromised state, which predisposes to renal mucormycosis.

Methods: Patients presenting during COVID 19 pandemic, whose clinical, radiological and histopathological features were suggestive of renal mucormycosis, were included and their data analysed.

Results: Out of total of eight cases, seven (87.5%) patients each had flank pain and fever, respectively. Four (50%) had previously tested positive for COVID by RT PCR and were administered steroids as well. Total leukocyte count was raised in all. CT was suggestive of renal infarcts in eight (100%). Delay in diagnosis (>1 week) occurred in four (50%). Six (62.5%) patients underwent nephrectomy, and four (50%) underwent bowel resection. Five (62.5%) patients got discharged and are doing well at last follow up. Three (37.5%) succumbed to the disease. The triad of fever, flank pain and renal infarcts on CT scan was highly predictive of renal mucormycosis. However CT Scan was not predictive of adjacent organ involvement. In four patients, antecedent COVID 19 infection and history of steroid intake was the only predisposing factor. Only one patient in the cohort was a known diabetic. Serum lactate did not correlate with outcomes. Delay in diagnosis and surgery was associated with poor outcomes.

Conclusions: COVID 19 may contribute to renal mucormycosis due to various mechanisms. High index of suspicion, early and aggressive surgical management with prompt administration of antifungals are essential for a satisfactory outcome.

POD 14 – 03
Effect of androgen-deprivation therapy in relieving urinary retention in patients with advanced prostatic carcinoma: A prospective study
Dr Abhishek Barala, Dr Vinay Tomar, Dr Nishkarsh Mehta
SMS Jaipur

Introduction: The incidence of urinary retention in advanced carcinoma prostate is around 13%. Aim of our study was to evaluate the efficacy of ADT in relieving urinary retention in patients with advanced prostate cancer presenting with urinary retention or a high PVR.

Patients and methods: Out of 210 patients with advanced prostate cancer from January 2020 to April 2021, 72 eligible patients with acute or chronic urinary retention offered to choose between an LHRH antagonist/agonist and orchidectomy as ADT. First trial of voiding without catheter (TWOC) given after 1 month, two additional TWOCs given each 1 month apart. All TWOC successful patients investigated with RFT, serum testosterone, PSA, and USG KUB.

Results: 64 patients opted for surgical ADT (group 1) and 8 patients opted for medical ADT (group 2). 21 patients voided successfully at first voiding trial, 29 after second and additional 14 after third trial. At 3 months, shows significant drop in PSA level (mean- 1.84 ng/mL) and the prostate volume (30.75%) which was statistically significant (P < 0.001). Raised creatinine was present in 32 with mean (SD) creatinine value 3.75 (1.06) mg/dl, became normalized in 90.62% (29/32) patients with mean (SD) value of 1.26 (0.59) mg/dl (P <0.05).

Conclusion: ADT in both forms is highly (up to 90%) effective in relieving retention over 3 months in patients with advanced prostate cancer. It reduced prostate volume significantly (up to 30%).

POD 14 – 04
Prospective study of use of statins and its effects on prostate size and prostate specific antigen
Dr Mukesh Kumar, Dr SS Yadav
SMS Jaipur

Objective: Prior studies suggest that statins may reduce PSA. In this study we investigated the effect of statins over prostate size (PS) and PSA after 1 year of medications in patients with BPH and raised PSA.

Materials and Methods: This is a prospective study of patients with BPH and raise serum PSA. Sample population was 800 and these patients were divided into four groups according to their medications: group A, β-blocker; group B, β-blocker+statin; group C, β-blocker+dutasteride; group D, β-blockers+statin+dutasteride. To
investigate changes in serum PSA, PV, and total cholesterol, analyzed the data at the time of initial treatment and after 1 year of medication.

Results: After 1 year, in group A 0.7% & 0.5% growth was noted in PSA & Prostate size respectively. In Group B 3.3% and a 0.9% reduction was noted in PSA & Prostate size respectively. The difference in PSA reduction between groups A and B was statistically significant (p<0.05) but volume reduction was not significant. Group C showed a 46.8% reduction in PSA and a 18.1% reduction in Prostate size. Group D showed a 48.2% reduction in PSA and a 20.3% reduction in PV. The difference in PSA & prostate size reduction between groups C and D was not statistically significant (p>0.05).

Conclusions: Statin only reduces PSA in BPH patients but no effect on prostate size. So statins can’t be used in BPH patients lower urinary tract symptoms.

POD 14 – 05
The unaccounted morbidity of covid 19 pandemic: a tertiary level center assessment of impact of pandemic on urolithiasis patients
Dr Sachan Ankit, Dr Jain Siddharth, Dr Aggarwal Nitish, Dr Shubhankar Gautam,
Dr Seth Amlesh
AIIMS, New Delhi

Background: SARS-CoV2 causes coronavirus disease 2019(COVID-19). Since March 2020, this pandemic has caused unprecedented human suffering. With limited medical services available and prolonged neglect, patients with urolithiasis have seen significant increase in morbidity during this pandemic.

Material and Methods: The study was conducted at an apex tertiary care center of North India. Patients who were diagnosed with urolithiasis before March 2020 but could not receive timely management due to pandemic were enrolled for study.

Results: The study included 100 patient with mean age of 39.7 years. There were 61 patients with renal calculus, 38 with ureteric calculus and 1 with vesical calculus.

Proposed management at initial assessment was PCNL(18), ESWL(42), URSL(28), RIRS(6) while post covid management done was PCNL(38), mini PCNL(6), ESWL(18), URSL(33). Forty-two patients required change in management due to Covid pandemic. The mean increase in stone size was 4.2 mm. DJ stent insertion/change was required in 56 patients and 11 among them had encrusted stent.

Eighteen patients had PCN placement and slippage occurred in 7 patients. Urinary tract infection episodes were seen in 21 patients requiring antibiotics.

Eight patients developed CKD with 3 requiring dialysis. One patient required nephrectomy for non functional kidney due to pelvic calculus.

Conclusion: Effect of Covid 19 pandemic on urolithiasis has been immense with disease progression in substantial number of patients which led to more invasive/aggressive procedures than would have been done initially. Early intervention should be undertaken in presence of complications or loss of renal function.

POD 14 – 06
Outcomes of Enhanced recovery after surgery (ERAS) protocol in major urological procedures
Dr Sandeep Kumar, Dr H Singh, Dr S Prakash, Dr Pradeep, Dr S Trivedi, Dr Y Singh
IMS, BHU, Varanasi

Introduction: ERAS refers to an evidence-based, patient-centred, multidisciplinary team developed protocol. Despite the added advantage of better preoperative, perioperative and post-operative care the role of ERAS protocol in major urological surgeries is still evolving.

Materials and Method: The study was conducted on the patients aged 18-75yrs, undergoing major urologic surgeries. A total of 80 subjects were randomly equally divided (n=40 each) into two groups; control and study (ERAS) groups. Pre, peri and post-operative parameters were recorded. Data collected was analyzed by SPSS statistical analysis version 20.0.

Results: There was no significant difference in preoperative parameters (albumin, creatinine, haemoglobin, urea, liver function test) in both the groups. Considering perioperative characteristics mean time to the onset of bowel movements (19.82 vs 47.87 hours), time to pass flatus and stools (41.47 vs 70.06 hours), mean length of stay (9.32 vs 13.65 days) in hospital was significantly less in ERAS group while there was no difference in mean operative time, mean blood loss, mean time to drain removal, rate of deep venous thrombosis. There was no significant difference in post-operative parameters and complications associated with surgery in both the groups.

Conclusion: The present study showed that ERAS protocol leads to faster bowel recovery, shorter length of stay compared to our conventional care, in major urological surgeries with comparable complications as control group.

POD 15 – 01
Prospective open label non-randomised study comparing hem-o-lok polymer ligating clip vs ligasure vessel sealing system for vascular control of renal pedicle in minimally invasive paediatric nephrectomy
Dr Mahesh Kumar Bapariya, Dr Pranjal Modi
IKRDC Ahmedabad
Introduction and objectives: A crucial step in laparoscopic nephrectomy is the ligation of the renal pedicle. Hem-o-lok® clip is a nonabsorbable polymer 2 clip with lock-engagement feature as well as teeth within the jaws, all of which provide greater security. Ligasure Vessel Sealing System is an alternative method of performing vascular ligation and providing hemostasis. Our aim is to assess feasibility and reliability of Hem-o-lok® polymer ligating clip and Ligasure vessel sealing system in minimally invasive pediatric nephrectomy.

Methods: The present prospective, open label, non-randomized study was undertaken in 30 children who had presented with benign non-functioning or poorly functioning kidney to the Department of Urology over a period of 16 months from 1st December 2016 to 31st March 2018. All patients orating complete metabolic workup. But very few studies have highlighted the role of vessel sealing system in pediatric retroperitoneoscopic nephrectomy. Renal vascular pedicle dissection & ligation time with (Hem-o-lok® group), was 15.73 ± 4.43 min while it was 6.6 ± 1.84 min in group II (Ligasure group) (P-value: < 0.01). Mean total operative time in group I was 116 ± 32.85 min and in group II was 103.67 ± 23.48 min (P-value: 0.24). Mean estimated blood loss in group I was 35.33 ± 13.55 ml and in group II was 32 ± 13.6 ml (P-value: 0.50).

Conclusion: Our study confirms feasibility and safety of vascular control of renal pedicle by Hem-o-lok® polymer ligating clip and Ligasure vessel sealing system in pediatric retroperitoneoscopic nephrectomy. Renal vascular pedicle dissection and ligation time is significantly longer with Hem-o-lok® clip than Ligasure.

POD 15 – 02
Role of metabolic evaluation in paediatric stone formers – what is ideal for our patients?
Dr Manjunath Irappa Wall, Dr Arun Chawla, Dr Padmaraj Hegde, Dr Avinash
KMC, Manipal

Introduction: Many studies have been done in the past to establish the common causes of renal stones in pediatric population by incorporating complete metabolic workup. But very few studies have highlighted the role of limited metabolic workup in such patients and whether it is sufficient to evaluate a child with renal calculus.

Aims And Objectives: To identify the metabolic abnormalities of paediatric stone formers. To formulate a limited metabolic evaluation protocol and assess its reliability.

Materials And Methods: A total of 151 children with urolithiasis were included in the study. During the primary admission the patients underwent nutritional and dietary evaluation, stone biochemistry was done where stones were available and 24-hour urine metabolic work up was done after 4 weeks stone free period.

Results: The 24-hour urine metabolic work up done showed hyperoxaluria (72.5%) was the most common abnormality. The most common metabolic abnormality identified in children with malnourishment was hyperoxaluria and hyperuricosuria which was seen in 50.4% and 30.5% respectively. Stone analysis was done in 16% of children which suggested calcium oxalate and calcium phosphate as most common components. 24-hour urine metabolic abnormality was well correlated with the stone analysis results.

Conclusion: The combination of a 24-hour oxalate, citrate, uric acid and calcium along with stone analysis should detect most of metabolic abnormalities in this population. This streamlined approach could simplify the metabolic evaluation and reduce healthcare costs.

POD 15 – 03
Supra-trigonal ureteric reimplantation with detrusorraphy (sturdy) - a novel technique for management of primary obstructive megaureters
Dr Tiwari M, Dr Natarajan K, Dr Babu R
SRMC, Chennai

Background/Aims: Conventional Cohen’s reimplantation involves crossing of the ureteric orifices making future instrumentation challenging and bilateral extravesical reimplantation has a high risk of urinary retention. We hereby report a novel technique of unilateral supra-trigonal reimplantation.

Materials and methods: Eighteen patients with unilateral obstructive megaureter underwent the procedure between 2011-2020. The procedure involved trans-vesical mobilization of megaureter in a common sheath. The bladder mucosa and detrusor were incised cranially for 2-3 cm safeguarding vas deference. The ureteric hiatus was transposed supero-laterally intravesically under vision and detrusorraphy was performed underneath. The ureteric orifice was placed back in its native position after tapering (n=12) and mucosa closed over it. All patients were followed up one year after surgery with ultrasonogram, VCU and renogram. Postoperative parameters were compared with preoperative values.

Results: The median age was 3 years (range 1-5 years) and M:F ratio was 13:5. The indications were recurrent UTI in all patients. The mean duration of surgery was 75 (52-106) minutes. Immediate postoperative complications included hematuria (n=3) and bladder spasm (n=4) all controlled with medication (Clavien Dindo 1-2). At 1 year follow-up, none of the patients had reflux on VCU. A diuretic renogram revealed improved drainage in all patients; the split renal function was static in 14 while it improved in 4 (none deteriorated). Mean ureteric diameter improved significantly (p=0.03) from 18mm to 8 mm after surgery; mean APD improved significantly (p=0.01) from 24mm to 10mm after surgery.
Conclusion: STURDY technique offers a viable novel alternative to conventional reimplantation for megaureters

POD 15 – 04
A tertiary care experience of primary cases of hypospadias and their patient related outcomes.
Dr Mukesh C Arya, Dr Ankur Singhal, Dr Ajay Gandhi, Dr Yogendra Shyoran, Dr Mahesh Sonwal, Dr Rambeer Singh
SNMC Bikaner

Introduction: Hypospadias is a common (1 in 250) congenital challenging surgery in urology. Herein, we present patient’s perspective and their outcomes in 268 primary hypospadias in one-stage.

Materials and Methods: From January 2010 - December 2019, 377 patients were studied and their outcomes were documented. Patients with prior hypospadias with complications (n=48), chordee without hypospadias (n=16), isolated penile torsion (n=12) and 33 patients who were lost to follow up were excluded from this study to evaluate only primary hypospadias cases (n=268).

Results & Discussion: Age varied from 6 months to 32 Years (Mean - 10.9 years). After orthoplasty, most common type was distal hypospadias 59% (n=158), middle in 22.8 % (n=61) & proximal hypospadias in 13.1% (n=35) patients. Also 5.2% (n=14) patients had penoscrotal transposition. Chordee was present in 71.2% (n=192) cases. (<30o in 44.8%, n=120, 30-60 in 22%, n=59, and >60o in 4.9%, n=13). Chordee was corrected using midline dorsal plication and ventral corporotomy. Urethral closure was done using TIP alone in 18 cases, TIP and spongioplasty (n=233) and three patients had inner preputial Onlay flap urethroplasty (koyanagi/ inner prepuce tube). The urethral plate was augmented by Snodgraft in 12 cases. The success rate of one-stage surgery was 73.5% in our series which correlated with PRO’s with high significance.

Conclusion: Hypospadias fistula is the most common complication of hypospadias surgery followed by glanular dehiscence in our series. Patients can have acceptable residual chordee and torsion and their surgical results correlates well with PRO

POD 15 – 05
Challenges in wilm's tumor: impact of subject, source and support system: 15 years experience from a tertiary care centre
Dr Puneeth Kumar KM, Dr Zain Tamboli, Dr Nayab Dansih, Dr Priyank Yadav, Dr M S Ansari
SGPGI Lucknow

OBJECTIVE: To study the clinic-pathological and demographical characteristics; outcome of multimodality treatment and challenges faced in treatment of Wilms tumor

METHODS: Retrospective data from our centre between 2003-2020 was studied. Patients underwent routine workup, biopsy +/- 4-6 cycles of neoadjuvant chemotherapy. Surgery was followed by chemotherapy with or without radiotherapy.

RESULTS: Total 60 patients presented with wilms tumor from 2003 till 2020. 64% (34/53) of the patients with age <10yrs were underweight. 33% of the parents had their graduation completed and their mean income was 21250 rupees/month. Average cost of hospital stay during surgery was 38000 rupees.

Late presentation (lump followed by pain and hematuria) was common (50%). Average size of tumor is 10cms in each stage (5cm - 20cms). 52% patients presented with stage I, 23%, 10%, 8% and 7% with stage II, III, IV and V respectively.

Mean follow up period was 50 months (1-111 months). The estimated 5 years survival rate was 84%, 80%, 66%, 60% and 50% for stage I, II, III, IV and V respectively. Mean survival time was 94, 77, 36, 49 and 31 months for stage I, II, III, IV and V respectively.

Overall 5 year survival was 72% and event free survival was 67%. Total 9 events occurred in total including metastasis and recurrences.

CONCLUSION : Although multimodality treatment has significantly increased survival in Wilms tumor in current times but limited financial resources, lack of awareness and difficulty in accessing healthcare facilities pose many challenges in managing these children optimally in a developing country

POD 15 – 06
Predicting the factors related to the success rate of Pediatric extracorporeal shockwave lithotripsy: A single center study of 10 years.
Dr Prasad Brahme, Dr Hemant Pathak, Dr Mukund Andankar, Dr Sandesh Parab, Dr Neel Patel
TNMC & BYL Nair Hospital, Mumbai
Extracorporeal shock wave lithotripsy (ESWL) is currently a first-line procedure of most upper urinary tract stones <2 cm of size because of established success rates, its minimal invasiveness and long-term safety with minimal complications. This is a retrospective cohort study of children less than 12 years who had ESWL for urolithiasis from January 2010 until August 2020.

Extracorporeal shock wave lithotripsy was done for 35 patients and 37 renal units (RUs) with mean age of $7.7 \pm 3.2$ years old, height of $1280 \pm 16.0$ cm, and BMI of $17.0 \pm 3$. Of 35 patients included, 37 renoureteral units (RUs) and 46 ESWL sessions were recorded. The mean overall treatment was $1.2 \pm 0.5$ sessions with mean stone length of $11.1 \pm 6.3$ mm and stone burden of $116.6 \pm 130.3$ mm$^2$. Within 3 months of follow-up, we recorded that the overall 3-month success rate was 100%, while the overall 3-month stone-free rate was 66.7%. Stone length ($p < 0.001$ and $p < 0.001$), stone perpendicular length ($p < 0.001$ and $p < 0.001$), and stone burden ($p < 0.001$ and $p = 0.001$) were found to be significantly associated with immediate success and 3-month stone-free status, respectively.

Office sildenafil test in the evaluation of erectile dysfunction

Dr Karthikeyan VS, Dr Manish Kumar, Dr Sivanandam SE, Dr Karthikeyan A
Sri Narayani Hospital and Research Centre, Vellore

Introduction: Assessment of erectile function (EF) in the outpatient department (OPD) is an important step in the evaluation of erectile dysfunction (ED) and in planning further management. We present our results of office sildenafil test (OST) in assessing EF.

Methods: EF (standard proforma), erection hardness score (EHS) and clinical examination findings of men ($N = 652$) presenting to the Andrology OPD of a tertiary care referral urological centre for ED, from January 2019 - December 2020 with complete data were included. After explaining, OST was performed by administering 100 mg sildenafil tablet on empty stomach (contraindications ruled out) and erection (EHS) was assessed by the principal investigator 1 hour later. Men unable to do or were uncomfortable with OST, were advised to perform house sildenafil test (HST).

Results: The mean (± SD) age was $38.8 \pm 9.8$ years (range: 17-72). Majority (558; 85.6%) were married. Median (IQR) EHS at presentation was 2 (1) and after OST was 4 (2), with a median (IQR) improvement of 1 (2). Among 206 (32%) patients without improvement after OST, 47 (22.8%) had improvement with HST. The most common side effects were headache (68; 10.4%) and giddiness (54; 8.2%). Out of men with EHS 1-2 after OST, 31% (53/170) underwent diagnostic intracavernosal injection (ICI) with bimix, and others chose initiation of phosphodiesterase inhibitors (PDE5i).

Conclusion: OST as the first line investigation in the Andrology OPD, gives an idea of improvement with PDE5i, its side effects, aids in charting the treatment and planning second-line investigations.

Management of Penile fracture and erectile function outcomes: A tertiary centre experience

Dr Ajay Gandhi, Dr Mukesh C Arya, Dr Ajay Gandhi, Dr Yogendra Shyoran, Dr Ankur Singhal, Dr Ramnaresh Daga, Dr Rakesh Singh
SP Medical College, Bikaner

Introduction: Penile fracture is an emergency condition. Common presentation is classical history of trauma to erect penis followed by detumescence, penile swelling, ecchymosis and discoloration. Management is primarily surgical. We report our experience in management of such cases.

Materials and Methods: This a retrospective study performed at our institution. Records of penile fracture cases managed over last 6 years were reviewed. Total of 71 patients were managed either by surgical (61 patients) or conservative (10 patients) approach. Sexual outcomes were measured with abbreviated International Index of Erectile Function (IEF 5) questionnaire and compared with preoperative scores.

Results: Most common aetiology was coital trauma, seen in 88.7% (n=63) of all patients. Mean age was 34.69 years. Urethral injury was present in 5 (7.4%) patients in the surgical group. Most common site of injury was ventrolateral in 41 patients (67.21%). Injury was present over proximal shaft in 58 patients in 81.6%. Mean follow up was 19.27 months ranging from 6 to 41 months. Erectile function was preserved (no deterioration in IIEF 5 category) in 96.72 % and 100% of patients from surgical and conservative groups.

Conclusion: Unexplained recurrent nocturnal urethral bleed as a presentation of penile fracture, should be kept in mind. Such peculiar presentation, to our knowledge, has not been reported in literature. This subgroup of patients can be managed conservatively with good sexual and voiding functional outcome.

Prospective randomised study to evaluate the post-procedure sexual function in patients undergoing ureterorenoscopy

Dr Gajanan Bhat, Dr Anuradha Shastry
Introduction and objective: The literature on post endourological procedure sexual dysfunction is very sparse. Hence, we decided to evaluate the effect of ureterorenoscopy on post-procedure sexual function in this study.

Methods: In this prospective randomized study, consecutive sexually active patients undergoing semi rigid ureterorenoscopy were randomized into three groups, with three different operative set up arrangements. Preoperative anxiety and sexual function was assessed using APAIS and BSFI (in males)/FSFI-6 (in females) respectively. All the participants were stented, which was removed after 3 weeks. Post-procedure sexual function and general discomfort was assessed at 1, 3 and 12 weeks using BSFI/FSFI-6 and VNRS respectively. The three groups were compared with respect to sexual function at these periods. The effect of preoperative anxiety, preoperative sexual function, age and general discomfort on post-procedure sexual function was analysed using multiple regression. Qualitative analysis was done for those who had persistent decrease in sexual function after 3 weeks of the procedure.

Results: 331 eligible patients were randomized into three groups. The group of patients who had a screen blocking vision of operating area, but had separate monitor to view endoscopy had better post-procedure sexual function compared to those who had vision of the operating area as well as to those whose eyes were blocked. This difference was statistically significant. Stenting had no significant effect on post-procedure sexual function.

Conclusions: Though ureterorenoscopy has a significant negative effect on sexual function, it can be reduced with proper preoperative counseling and an ideal operative room set up.

POD 16 – 4
Balanoposthitis - a marker for uncontrolled diabetes mellitus in adults
Dr Navaneethakrishnan Venkatachalam, Dr Kuppurajan Narayanasamy
Koval Medical Center and Hospitals, Coimbatore

Introduction: Acute Balanoposthitis (ABP), characterised by an inflammation of the prepuce and glans penis, is a commonly encountered problem in urological practice. Balanoposthitis is an indication for circumcision, however, a significant number of patients have co-existing undiagnosed diabetes mellitus, and have resolution of disease with glycemic control, but the same has not been documented well in literature.

Materials and methods: Prospective observational study. All patients presenting with ABP in our clinic from 1st January 2020 to 31st December 2020 were incorporated in the study population. Patients underwent evaluation for diabetes with HbA1c and RBS. All patients were followed up till resolution of symptoms and clinical course noted.

Results: A total of 45 patients presenting to the clinic were diagnosed to have ABP. 27(60%) of the 45 patients incorporated in the study were presenting with recurrent symptoms. Most common presenting age was 20-40 years, with nearly 62% (n=27) achieving cure with medical management of DM. Diabetics who presented with ABP had poor glycemic control.

Conclusion: 60.5% patients in our study who presented with ABP were found to be diabetic, with 91.3% of them having poorly controlled/untreated diabetes mellitus. 62 % patients achieved complete cure with medical management alone. ABP in diabetics was a sign of poor glycemic control. As a result we suggest that all patients presenting with balanoposthitis should undergo evaluation for diabetes mellitus, with the aim of early detection and treatment of diabetes mellitus, to avoid the need for surgical intervention.

Moderated Video Paper Sessions

MVID 01 - 01
Modified Laparoscopic Extravesical Supratrigonal Vesico-vaginal Fistula Repair - A video demonstration
Dr Rohith G, Dr Das MK, Dr Mandal S, Dr Nayak P, Dr Gaur AS, Dr Pandey A, Dr Agrawal S
AIIMS, Bhubaneswar

Introduction and objective: Vesicovaginal fistula (VVF) repairs are successfully achieved either via a trans-vesical or an extravesical approach. The choice of approach mainly depends on the location and complexity of the fistula, along with the surgeon’s preference. Through this video presentation, we describe a modified laparoscopic supra-trigonal VVF repair accomplished extravesically.

Methods: A 28-year-old lady presented with continuous urinary incontinence following an open abdominal hysterectomy, which she underwent six months ago. After confirmation with cysto-vaginoscopy, a modified laparoscopic extravesical repair was performed. The fistula site was approached using the standard three-port laparoscopic technique. Laparoscopic scissors carried out dissection at the fistula site with a finger placed in the vagina as a guide (bimanual approach). After separating both the fistulous openings, a vicryl 3-0 suture was used to suture both the fistula openings separately. An omentum flap was interposed between both the suture lines, and a Foley catheter was inserted.
Results: The total operative duration was 56 mins with a negligible amount of blood loss. The patient’s postoperative course was uneventful, and she was discharged on day three. The Foley catheter was removed following an unremarkable cystogram after 21 days. At six months follow-up, the patient continues to be asymptomatic.

Conclusions: Our technique of supra-trigonal VVF repair with standard three ports with a bimanual approach of incising and dissecting the fistulous tract without a cystotomy and suprapubic cystostomy is feasible. This approach shows a favourable impact on reducing total operative time and can be quickly adopted.

MVID 01 - 02
Robot assisted laparoscopic vesico-vaginal fistula repair with omental interposition: A prospective evaluation of our experience
Dr Ruchi Mittal, Dr Anup Kumar, Dr YM Prashanth, Dr Sandeep Kumar, Dr Siddharth Yadav, Dr Saumya Nayyar, Dr Ketan Kapoor
Safdarjung Hospitals, New Delhi

Introduction & Objective: We prospectively evaluated our experience of Robot assisted laparoscopic VVF repair with omental interposition in trigonal and supra trigonal VVF.

Methods: In this prospective study, all consecutive patients with trigonal and supra trigonal VVF, from Oct 2019 to Feb 2021, requiring Robot assisted laparoscopic VVF repair with omental interposition (using da-Vinci Xi Robotic system) were included. The patients with post radiotherapy and VVF with malignancy were excluded from the study. The various clinical data were recorded and analyzed. We are presenting video of one such case.

Results: A total of 19 patients were included in study. The mean age was 37.1 years. The fistula was post open abdominal hysterectomy in 10(52.6%) and post lower segment caesarean section (LSCS) in 9(47.4%) patients. The mean fistula size was 2.5 cm. The fistula location was trigonal in 7(36.8%) and supra trigonal in 12(63.2%) patients. The mean operating time and mean estimated blood loss were 109.3 min and 67.3 ml respectively. Six (31.5%) patients required simultaneous modified Lich Grigori ureteric reimplantation. There was no open conversion and intraoperative complications. Mean catheterization time, mean hospital stay and mean convalescence were 10.9 days, 4.1 days and 1.9 weeks respectively. At mean follow up of 6 months, postoperative complications were mainly clavien 1-2 in only 1(5.2%) patient. None of the patients showed recurrence of VVF or voiding symptoms.

Conclusion: Robot assisted laparoscopic VVF repair with omental interposition in trigonal and supra trigonal VVF is feasible, safe with excellent efficacy, even in previously failed VVF repair.

MVID 01 - 03
Robot assisted post radiation vesico vaginal fistula repair with ureteric reimplantation
Dr Varun Agarwal, Dr TB Yuvaraja, Dr Santosh Waigankar, Dr Preetham Dev, Dr Akash Shah, Dr Abhinav Pednekar
Kokilaben Hospital, Navi Mumbai

Introduction: Pelvic radiation is one of the leading causes of vesico-vaginal fistula (VVF). Robotic approach has been described to mitigate the limitations of open surgical approach and difficulties encountered with laparoscopic technique like prolonged learning curve and difficult suturing. We hereby describe our technique of managing a post radiation VVF robotically.

Methods: 49-year-old female underwent chemotherapy and external beam radiotherapy (RT) with brachytherapy boost for carcinoma cervix. Two months later, she developed continuous urinary leak. Cystoscopy revealed 2.5 cm VVF just above the level of trigone. Present PET-CT showed no evidence of disease. Robot VVF repair was done via transperitoneal approach. Vagina was opened and fistula was assessed. Plane was created between bladder and vagina. Adequate dissection was not possible due to post RT status, hence hysterectomy was performed. Due to close proximity of right ureteric orifice, modified Heineke-Mikulicz type of ureteric reimplantation was done. Fistula was closed in two layers with interposition of omentum and round ligament.

Results: Console time was 295 minutes, with blood loss of 200ml. Drain was removed on 4th day while patient was discharged after 7th days. Suprapubic catheter (SPC) was clamped and per urethral catheter removed on day 21. Patient voided well and SPC was removed after 3 days. DJ stent was removed after 6 weeks. Currently patient is voiding well without incontinence.

Conclusion: Good technique, appropriate interposition flap and adequate post-operative drainage are extremely essential for a successful VVF repair. This video establishes the feasibility of robotic technique in management of post radiation VVF.

MVID 01 - 04
Ileovaginoplasty in an unclassified case of congenital mullerian and urogenital sinus abnormality
Dr Kamlesh Singh, Dr Vyasa A, Dr Rochlani T, Dr Patwardhan S
Seth G.S medical college, KEM hospital, Mumbai
Introduction and objective: Intestinal vaginoplasty is a vascularized pedicled graft which can be easily sutured and has a reliable blood supply. It is well lubricated due to mucus secretion and is well capacious. We report the technical details of illeovaginoplasty by this video.

Method: 14 year old female with recurrent bilateral iliac fossa pain associated with cyclical gross hematuria. Radiological investigations revealed uterine didelphys, hematocolpos, lower one third hypoplastic vagina and partially organized collection in right iliac fossa mostly representing hematoma. However the vesicouterine fistula could not be demonstrated. She underwent illeovaginoplasty with evacuation of hematocolpos.

Results: Post-surgery she had normal menstruation without abdominal pain and cyclical hematuria. She is on regular vaginal dilatation. Post 1 year genitogram reveals good capacious ileal segment.

Conclusion: Our experience with ileum as a substitution for neovagina is free of major complications. Advantages include longer pedicle length which can reach introitus, ease of anastomosis, and smaller lumen in comparison to the colon which is adequate for sexual intercourse.

MVID 01 - 05
Initial Experience of a New Technique of Dorsal Onlay Skin Flap for Penile Urethral Strictures by Modified Orandi Technique
Dr Arun Chawla, Dr Suraj Jaydev Reddy, Dr Anupam Choudhary
KMC, Manipal

Introduction: Ventral Penile skin flap urethroplasty by Orandi technique is associated with fistula, diverticula. Dorsally placed skin flaps can reduce these complications. We present modified technique of dorsally placed skin flap for penile urethral strictures.

Methods: We present step by step technique of Modified Orandi technique - Dorsal placement of penile skin flaps. (Voice over added)

Results: Out of 11 patients, followed for a minimum follow-up of 3.4 months and maximum follow-up of 18 months. There were 3 cases with complications (n=1 fullness shaft during voiding, n=1 hair in urethra, n=1 urethrocutaneous fistula). No recurrence of stricture was seen.

Conclusions: Placing skin flap dorsally by modified technique reduces recurrence with risk of hematoma, urethrocutaneous fistula.

MVID 01 - 06
An unpretentious solution for an intricate problem - effective management of a post traumatic complex recto-urethral fistula
Dr Ankit Vyas, Dr Kamlesh Singh, Dr Rishikesh V, Dr Sujata Patwardhan, Dr Bhushan Patil,
Dr Tarun Rochlani
KEM, Mumbai

Introduction: Post-traumatic recto-urethral-fistula(RUF) are very difficult to manage and are peculiarly quite notorious for recurrence and infections. We report such a case of a post-traumatic complex RUF managed successfully in a most simplistic way by just following the basic principles diligently.

Case Presentation: A 45year old patient post road traffic accident with painful acute urinary retention, fracture left femur, skin avulsion with necrosis over left thigh and lower abdomen, rectal and perineal injuries. After stabilisation and resuscitation, debridement, femur plating, suprapubic cystostomy insertion and diversion colostomy was done followed by skin grafting 6weeks later. MCU and RGU films showed rectourethral fistula with communication between bulbar urethra and rectum. After adequate healing of wounds, resolution of infection & proper nutritional build-up, he underwent rectourethral fistula excision with end-to-end anastomotic urethroplasty by trans-perineal approach. Peri-urethrogram after 6weeks showed normal urethral lumen without any narrowing or contrast extravasation.

Discussion: Various methods have been described for traumatic-RUF management. M-Ali-1997 has described used of rectal advancement flap, whereas Shanmugasundaram-2013 has advocated porcine submucosal flaps. Though these techniques help in healing, prevents recurrence & no doubt are effective; however, if certain basic principles are followed diligently like achieving both urinary and faecal diversion at the earliest, eliminating infection, building nutritional status of the patient & applying sound surgical techniques, similar effective results can be achieved even by simpler methods.

Conclusion: Complicated post-traumatic RUFs requires outmost prompt & timely treatment & can be managed in an unpretentious simplistic yet effective ways: just need to keep the basics right.

MVID 02 – 01
A prospective evaluation of perioperative and Trifecta outcomes of Robot assisted Laparoscopic transperitoneal partial nephrectomy in clinical T1b renal tumors
Dr Anup Kumar, Dr YM Prashanth, Dr Sandeep Kumar, Dr Vijayender Kanwar, Dr Siddharth Yadav, Dr Saumya Nayyar, Dr Ketan Kapoor
Safdarjung Hospital, Delhi
Introduction & Objective: We prospectively evaluated the feasibility, safety, efficacy and Trifecta outcomes of robot assisted laparoscopic transperitoneal partial nephrectomy (RPN) in clinical T1b renal tumors

Methods: All consecutive patients undergoing RPN (using da-vinci Xi robotic system) for clinical T1b renal tumors and normal contralateral kidney by a single surgeon between Oct 2019 and January 2021 at our institution were included. Patients with absence of grade ≥2 Clavien-Dindo complications, warm ischemia time (WIT) ≥25 minutes, ≥15% postoperative estimated glomerular filtration rate (eGFR) decrease and negative surgical margins were reported to achieve Trifecta outcomes. We are presenting video of one such case.

Results: Fifty Six patients were included in the study. The mean tumor size was 5.9 cm. The tumor was upper polar in 17(30.3%) patients, mesorenal in 26(46.4%) patients and lower polar in 26 (46.4%) patients. The mean operating time and estimated blood loss were 117.3 min and 127.1 ml respectively. The mean ischemia time was 19.3 min. The WIT was >25 min in 2 patients. The positive surgical margins were nil. The intraoperative and postoperative complications were 2.2% and 6.2% respectively and mainly Clavien 1-2 only. Two patients had a >15% postoperative eGFR decrease. The trifecta outcomes were achieved in 47 (83.9%) patients.

Conclusions: RPN for clinical T1b renal tumors, is feasible, effective with preservation of renal function, acceptable complications and optimal strict Trifecta outcomes.

MVID 02 – 02
Perioperative outcomes of Robot assisted Lap Radical Prostatectomy in Locally Advanced High Risk Prostate Cancer: A prospective evaluation
Dr Anup Kumar, Dr YM Prashanth, Dr Sandeep Kumar, Dr Vijayender Kanwar, Dr Siddharth Yadav, Dr Saumya Nayyar, Dr Ketan Kapoor
Safdarjung Hospital, Delhi

Introduction & Objective: We prospectively evaluated the feasibility, safety and perioperative outcomes of Robot assisted laparoscopic radical prostatectomy (RARP), as multimodality approach, in locally advanced high risk prostate cancer.

Methods: All consecutive patients undergoing RARP (using da Vinci Xi Robotic system) in locally advanced high risk prostate cancer, as a multimodality approach, by a single surgeon, between Oct 2019 and Feb 2021, at our institution were included. The various clinical data were recorded and analyzed. We are presenting video of one such case.

Results: A total of 71 patients with locally advanced and high risk prostate cancer were included. The mean age was 64.1 years with mean serum PSA of 13.9. The mean operating time and mean estimated blood loss were 147.8 min and 137.1 ml respectively. The intraoperative complications were seen in only 2 (2.8%) patients, as Clavien 1-2. The mean catheterization time was 6.7 days. The postoperative complications were seen as Clavien 1-2 in 2 (2.8%) patients. In histopathology, 19.1% and 80.9% patients had pT2 and <pT3a respectively. The Gleason score 7, 8 and 9 were present in 9.6%, 71.4% and 19% patients respectively, in the final specimen. The positive surgical margins were present in only 3 (4.2%) patients. The mean number of lymph nodes removed was 18. The continence rate at 6 weeks and 3 months was 73.2% and 84.5%.

Conclusions: RARP in patients with locally advanced high-risk prostate cancer can be offered as first intervention, followed by adjuvant treatment, as multimodality approach. It is feasible, safe with acceptable perioperative morbidity.

MVID 02 – 03
Retroperitoneoscopic Robot assisted Partial nephrectomy: A way to make complex renal tumour simpler
Dr Ginil Kumar Poojari, Dr Ravi Chandran, Dr Sreedhar, Dr Shivaraj B, Dr Abhishek Laddha, Dr Sanjeevan, Dr Appu Thomas
AIMS Kochi

Introduction: Robot assisted partial nephrectomy (RPN) has become the preferred method for small renal masses in centres where it is available. It combines all the advantages of minimally invasive surgery to open surgery. Even though trans peritoneal and retroperitoneal approaches are available for RPN, the later is not used by majority due to lack of exposure to the approach.

Materials and Method: A 49 year old gentle man, on metastatic evaluation for papillary carcinoma of thyroid, diagnosed to have a posterior hilar 4.2 cm partially exophytic left renal tumour. He underwent retroperitoneoscopic RPN. The video was recorded and edited to 5.46 minutes.

Results: The operating time was 2hr 5 minutes and warm ischaemia time was 27 minutes. Even though the tumour was at a difficult location (R.E.N.A.L score 11p) and vascular anatomy of the kidney (with three arteries) was very complex, the approach gave significant benefit since the vessels and tumour were easily visualised with minimal dissection from behind. Blood loss was <50cc.

Conclusion: In retroperitoneal approach, the renal vessels are better visualised as they are directly in front of the camera. The posterior hilar tumour can be easily approached compared to transperitoneal approach as kidney need not be completely mobilised. Retroperitoneal Partial nephrectomy is feasible and may be considered as a
better option than trans peritoneal approach in case of posterior hilar tumour with complex vascular anatomy

MVID 02 – 04
Robotic Mainz-II pouch undiversion with intracorporeal ileal conduit
Dr Kiran S, Dr Vishnu R, Dr Dinesh CT, Dr Sunil B, Dr Praful B, Dr Kishore TA
Medical Trust Hospital, Kochi

Introduction: Continent urinary diversion like ureterosigmoidostomy and its modification Mainz II(Sigma-rectum pouch) results in increased contact time between urine and intestinal segment resulting in life threatening metabolic complications. Ileal conduit, being an incontinent diversion has lower risk of metabolic complications. Hence ureterosigmoidostomy has been largely replaced by conduit diversion. The present video is of Mainz II modified ureterosigmoidostomy undiversion with ileal conduit using robotic approach (intracorporeal).

Methods: A 71 year old gentleman known diabetic and hypertensive had undergone Radical Cystectomy with Mainz II pouch (modified ureterosigmoidostomy), 4 months back for Muscle invasive bladder cancer elsewhere. Following this he had multiple hospital admissions with recurrent episodes of severe sepsis, electrolyte imbalances requiring prolonged ventilatory requirement and ICU stay. Hence a decision was made to convert the Mainz II pouch into an ileal conduit. Traditionally it has been done by open technique. Here we performed the undiversion in a robotic intracorporeal approach.

Results: Total operating time was 210 minutes. Console time was 154. Total blood loss was 90ml. Discharged on Postoperative day-4. There were no immediate or short term complications and the patient is doing well with no further episodes of sepsis or dyselectrolytemia.

Conclusion: Robotic Mainz-II Pouch Undiversion with Intracorporeal Ileal conduit is a safe and feasible option and avoids the morbidity of an open surgery. Undiversion into ileal conduit reduces infective and metabolic complications.

MVID 02 – 05
Robotic nephron sparing surgery (R-NSS) for T2 / T3, a lesion with high nephrometry score
Dr Ashwin Giridhar, Dr Sharma Rakesh, Dr Mohan Amaresh, Dr Sri Sai Harsha
Mangalore

Introduction & Objectives: Nephron sparing surgery (NSS) is successfully used in treatment of T1 lesion and now with the advent of advanced surgical accessories and intra-operative imaging techniques T2/ T3 lesions are also amenable to NSS. We present a case of Left renal T2 lesion and Left renal T3a lesion (with thrombosis in interlobar renal vein branch), high nephrometry score, comorbidity like diabetis and hypertension, for Robotic NSS with minimal postoperative morbidity.

Materials & methods: Diabetis and hypertensive, CECT (A+P) revealed T2 renal mass and T3a renal lesion with thrombosis in interlobar renal vein branch, high nephrometry score, comorbidity like diabetis and hypertension, for Robotic NSS with minimal postoperative morbidity.

Materials & methods: Diabetis and hypertensive, CECT (A+P) revealed T2 renal mass and T3a renal lesion with thrombosis in interlobar renal vein branch, high nephrometry score, comorbidity like diabetis and hypertension, for Robotic NSS with minimal postoperative morbidity.

Results: Total operating time was 140 and 150 minutes, warm ischemia time was 19 and 22 minutes respectively. Total blood loss was 200ml. Calyx were sutured, No DJ stent placed, intra-operative frozen section was performed which suggested negative margin. Post-operative period was uneventful. Patients were discharged on POD â€’4.

Results & Observations: Final Histo-pathology report - CLEAR CELL RENAL CELL CARCINOMA, with interlobar renal vein thrombus in one of the case. Capsular and parenchymal margins of resection are free of tumor. Follow up CT scan performed at1 year showed no evidence of any recurrence with adequate residual functioning renal parenchyma.

Conclusions: Robotic NSS for T2/T3a lesion is feasible with minimal/ no morbidities.

MVID 02 – 06
Robotic Nephron-Sparing Surgery in Challenging Scenarios - NH Experience
Dr Jagadish Kaushik B, Dr Prashanth Kulkarni, Dr Saurabh Bhargava
MSMC, Narayana Health City, Bengaluru

The greater recognition of the importance of preservation of renal function alongside cancer control has shifted treatment of renal masses towards nephron-sparing techniques. With the increasing experience of Robotic-Assisted Laparoscopic Partial Nephrectomies (RALPN) for the management of small renal masses, complex cases can be treated with minimally invasive partial nephrectomy. As the indications for partial nephrectomy continue to expand, we aim to present our experience in performing Robotic-Assisted Laparoscopic partial nephrectomies in challenging scenarios through this video. The challenging scenarios where one could perform RALPN are partial nephrectomies performed on hilar tumours, multiple ipsilateral tumours, solitary kidney, completely endophytic tumours, bilateral renal tumours, large tumours, horse-shoe kidney and ectopic kidneys. In this video we present cases of Robotic Nephron-Sparing
Surgery performed on hilar tumour, horseshoe kidney, kidney with multiple ipsilateral tumours and a case of bilateral renal tumours and briefly describe how we tackle these unusual situations. We would like to conclude by stating that in such complex cases, though radical nephrectomy might provide excellent oncologic outcome, it would predispose patients to chronic kidney disease. RAPN is a safe and effective surgical modality that allows complex renal tumours that were previously reserved for open partial nephrectomy in the pure laparoscopic era to be managed with a minimally invasive approach. With proven safety it should be prioritized for small renal masses even in a wide range of complex and challenging situations to give patients equal oncologic outcomes, better preserved renal function and rapid recovery.

MVID 03 – 01
Robotic Partial Nephrectomy for multiple renal tumours
Dr Anil Kumar T, Dr Kinju Adhikari, Dr Raj Patel, Dr Tejus Chiranjeevi, Dr Srivatsa N,
Dr Raghunath SK
HCG Cancer Center, Bengaluru

Objective: Feasibility of Robot assisted Partial Nephrectomy in multiple renal tumours.
Patient and Surgical Procedure: 1. 35 year old hypertensive with incidentally detected two lower polar tumours on the left side with largest one being 5.5cm, underwent partial nephrectomy with tumours being taken out as a single specimen. Renorrhaphy was done in two layers as pelvicalyceal sytem was opened. Ischemia time was 26 min.
2. 52 year old hypertensive with incidentally detected three lower polar tumours on the left side with largest one being 4.5cm, underwent partial nephrectomy with tumours being taken out as different specimens. Renorrhaphy was done in single layer. Ischemia time was 43 min.
Result: Patients immediate postoperative outcome was satisfactory. None had blood transfusion either intraoperatively or postoperatively. Length of hospital stay was 3 days in both the patients. No evidence of tumour recurrence in 2 years follow up in either of the patients. The eGFR of both the patients was almost the same as compared to preoperative values.
Conclusion: Robotic partial nephrectomy in multiple renal tumours is feasible and safe with maintained renal parameters even after 2 years.

MVID 03 – 02
Transperitoneal robotic RPLND for post chemotherapy NSGCT - surgical nuances with special emphasis on hammocking technique
Dr Puneeth Kumar KM, Dr Madhur Anand, Dr Abhay Kumar, Dr Aneesh Srivastava,
Dr Uday Pratap Singh, Dr Sanjoy Sureka
SGPGI Lucknow

Objective and Introduction: RPLND is standard of care for treating post-chemotherapy residual lymph node mass in non-seminomatous germ cell tumor (NSGCT). Robotic RPLND offers technical advantages with decreased morbidity. We describe the surgical nuances of this procedure through this video presentation
Methods: 27-year male presented with mixed germ cell tumor of left testis (10.6 x 9.4 cm) with multiple residual retroperitoneal lymph node masses (largest 5.8 cm in para-aortic region) after left high inguinal orchectomy and four cycles of chemotherapy. Robotic RPLND was performed. Ports were placed in a linear configuration below the level of umbilicus, 7 cm apart and docked with the robot facing the head-end of the patient.
Results: Conglomerate retroperitoneal lymph node mass was removed with a modified template with boundaries between ureters laterally, renal hila superiorly (suprahilar dissection also done to remove lymph nodes) and bifurcation of common iliac vessels caudally. Entire procedure was done in a single docking position with no arm conflict or internal limitation by using hammocking technique. Surgery was uneventful with operative time of 230 minutes and blood loss of 90 ml. Patient had swift post-operative recovery and was ambulatory on POD 1. Histopathology showed 38 lymph nodes (20 para-aortic nodes, 15 pre and paracaval nodes, 3 suprahilar nodes) with 4 positive for metastatic mature teratoma with no embryonal and yolk sac components.
Conclusion: Hammocking technique in Da Vinci Xi facilitates the surgeon in RPLND by decreasing patient morbidity with nodal yield comparable to open technique with excellent vision, dexterity and ergonomics.

MVID 03 – 03
Robotic Non-Clamp Partial nephrectomy
Dr Kinju Adhikari, Dr Anil Kumar T, Dr Raj Patel, Dr Tejus Chiranjeevi, Dr Srivatsa N,
Dr Raghunath SK
HCG Cancer centre, Bengaluru

Non clamp Partial Nephrectomy is gaining popularity because of its inherent benefit of avoiding renal ischemia. We present a step-by-step video of Robot assisted (Non Clamp) Partial Nephrectomy in a 55 year gentleman, a known case of hypertension, with incidentally detected left exophytic renal mass in the interpolar region during regular health checkup. Renal mass was 5.1x3.8x5.5 cm in size, exophytic arising from anterior interpolar cortex.
Standard port placement for Partial nephrectomy done with patient in right decubitus position. Only the artery supplying the renal tumour was clipped and cut. Renorraphy done using sliding technique. Postoperative period was uneventful. Length of hospital stay was 3 days. eGFR at 3 months and 1 year was 82 ml and 79 ml/min/1.73m² respectively. Patient is doing well with no evidence of recurrence at 1 year of follow up. Robotic Non clamp partial nephrectomy is safe and feasible. Successful Robotic Non Clamp Partial nephrectomy can reduce global renal ischemia and can be used in patients with compromised renal function.

MVID 03 – 04
Robot assisted ureteric reimplantation using psoas hitch (RAURPH): point of technique
Dr Ranjan R, Dr Mittal A, Dr Panwar V, Dr Kumar S, Dr Talwar HS, Dr Mandal AK
AIIMS, Rishikesh

Introduction: Robotic surgery in the treatment in certain urological diseases has become a mainstay. With the increasing use of the robotic platform, some surgeries which were historically performed open have transitioned to a minimally invasive technique. Recently, the robotic approach has become more utilized for ureteral reconstruction. Here, we demonstrate our technique of robot assisted ureteric reimplantation using psoas hitch (RAURPH) for distal ureteric stricture into ten simple steps.

Case details: A 13 years old girl underwent exploratory laparotomy for repair of post traumatic (penetrating injury) vesico-vaginal fistula. She developed right flank pain after 7 days of surgery. Ultrasonography showed right mild hydroureteronephrosis. CT urography revealed right lower ureteric stricture and mild upstream hydroureteronephrosis. Cystoscopy showed normal urinary bladder and ureteric orifices and guidewire couldn't be negotiated through right ureter beyond 5 mm. Diagnosis of right distal ureteric stricture was made.

Results: Right robot assisted ureteric reimplantation using psoas hitch has been done and demonstrated here. Intra and post-operative phase was uneventful and without any complication. Per urethral catheter was removed after 3 weeks and DJ stent removed after 6 weeks. Ultrasound after 3 months showed no hydronephrosis.

Conclusion: Robot-assisted ureteral reimplantation using psoas hitch technique is safe for the patient and more ergonomic with three-dimensional views with depth perception for the surgeon as compared to traditional methods.

MVID 03 – 05
Robotic ureteric tailoring and reimplantation for primary obstructive megaureter with ureterocoele: Surgical technique
Dr Talwar HS, Dr Kumar S, Dr Navriya S, Dr Ranjan R, Dr Upadhyay A, Dr Mandal AK
AIIMS, Rishikesh

Introduction and Objective: Primary obstructed megaureters (POM) are defined as dilated tortuous ureters that occur due to an abnormal adynamic segment at or near the vesicoureteric junction. Definitive management includes remodeling and reimplantation of ureter in a non refluxing fashion. We herein describe the management of symptomatic POM with recurrent UTI by a robot assisted surgical repair.

Methods: A 29-year-old female presented with right flank pain for 2 years. CT scan revealed a thickening at right VUU with gross upstream hydroureteronephrosis. Endoscopic examination revealed a small ureterocoele and upstream grossly dilated ureter. Her pain was relieved post stenting. Urine cytology and tuberculosis work up was negative. A nuclear scan revealed a functioning kidney with sluggish drainage and a differential function of 26%.

Results: She underwent a robot assisted reimplantation of ureter with plication using Kaliscinski technique. The total console time was 170 minutes with a minimal blood loss. Drain was removed on day 2 and patient discharged on day 3 with stent and catheter in-situ which were removed after 3 weeks. A cystogram done at 3 weeks revealed a bladder capacity of 400 ml with no contrast extravasation or reflux. Patient is doing well 4 weeks post-op.

Conclusions: Ureteric tailoring with non-refluxing reimplantation is the standard of care for primary obstructed megaureters that present with recurrent UTI, have persistent upstream dilatation or a differential function of less than 40%. Robot assisted laparoscopic approach is a safe, feasible, reproducible and an effective approach with minimum peri operative morbidity and excellent outcome.

MVID 03 – 06
Robotic diverticulectomy with right ureteric reimplant for Large Primary Congenital Bladder Diverticula presenting in adulthood
Dr Wadhwa P, Dr Goel S, Dr Zafar FA, Dr Ahlawat R
Noida

Introduction and Objective: By definition; primary congenital bladder diverticula (PCBD) occur in absence of obstructive factors, usually presenting in childhood. We herein present a middle aged patient who presented with large PCBD, its management and outcome.
Method: The present case is of a 52-year-old gentleman presented with history of recurrent urinary tract infections (UTI) despite having good urinary stream. CECT abdomen showed 88 x 49 mm diverticulum arising from right posterolateral wall of bladder, seen extending para-rectally on the right side. PVR - 537 ml. Right kidney appeared small and poorly functioning. Uroflowmetry show unobstructed flow. Cystoscopy showed Grade 1 non-occlusive prostate with wide necked bladder diverticulum, the right ureteral orifice was opening within medial wall of the diverticulum. He underwent Robotic diverticulectomy and ureteric reimplantation.

Results: Patient was discharged at Day 2. Foley catheter removed on Day 10. At 1-year follow up, patient did not experience recurrence of UTI. Our patient probably had right sided VUR since childhood, but presented later in adulthood due to recurrent UTI. In literature, PCBD are commoner in males, common age of presentation being 6 months to 9 years. And are associated with VUR, 15-33% have associated ipsilateral renal dysplasia. Prior placement diverticula more likely to present with retention.

Conclusion: Most Adult Bladder Diverticula are secondary to Bladder outlet obstruction, usually BPH-Concurrent or primary Bladder Outlet obstruction is key to success. It is unusual for Large (PCBD) to present in Adulthood. Diverticulectomy with ureteral reimplantation is treatment of choice for PCBD

MVID 04 – 01
Robot Assisted Left Simple Nephroureterectomy for Complete Duplex Nonfunctioning Upper Moiety with Gross Hydroureteronephrosis
Dr Pratik Garg, Dr Amit Bansal, Dr Ruchir Maheshwari, Dr Samit Chaturvedi, Dr Devanshu Bansal, Dr Pratik Garg, Dr Anant Kumar
Max Superspeciality Hospital, Saket, New Delhi

Introduction: We discuss the lessons learnt from robot assisted upper polar simple nephroureterectomy (RAUPN) for small child with unilateral complete duplex system with severe upper moiety hydroureteronephrosis.
Methodology: A 3 year of girl presented with recurrent urinary tract infections. On examination, the child had left sided abdominal fullness extending from xiphisternum till the suprapubic region. Computed tomography showed grossly dilated and tortuous upper moiety ureter. There was no reflux in the lower moiety on micturating cystourethrograph. She was diagnosed to have Left complete duplex system with non-functioning upper moiety with severe hydroureteronephrosis and planned for cystoscopy, left retrograde pyelography with ureteric catheter placement into normal ureter and RAUPN.

Results: In right lateral position, a 12-mm assistant port was initially placed under visual guidance, following which; three 8-mm robotic ports were placed. Key steps of the procedure were mobilization of descending colon, ureteric mobilization, ureterotomy and ureteric decompression, upper polar hilar dissection, division of corresponding vessels, upper moiety excision, piecemeal excision of dilated ureter and laying open of lower ureter with preservation of common ureteric sheath. Viability of normal moiety was confirmed in real time using the Firefly technology.

Conclusion: Salient lessons learnt from this procedure included careful insertion of robotic ports and instruments under vision in a pediatric case with limited working space, decompression of the dilated ureter to improve working space and ease ureteric retraction, preservation of normal moiety hilar structures, avoidance of handling of normal ureter and meticulous preservation of common ureteric sheath.

MVID 04 – 02
Surgical management of Male epispadias repair - Our experience in 23 cases in last 6 years.
Dr Ajay Gandhi, Dr Mukesh C Arya, Dr Ajay Gandhi, Dr Ankur Singhal, Dr Ramnaresh Daga, Dr Yogendra Shyoran, Dr Prabhoor Singh
SPMC, Bikaner

Introduction: Male epispadias is a rare anomaly (1:117,000). It presents with ventral hood, dorsal chordee and proximal urethral opening dorsally with pubic diastasis. Incontinence is present in 70% of penopubic epispadias.

Aim: Management of incontinence and vesicoureteral reflux are primary goals. Secondary goals are creation of a straight, cosmetically acceptable penis of adequate length that is functional for sexual intercourse.

Material and methods: Among these 23 cases, 17 were male and 6 were female. Among males, fourteen, two and one patient had Penopubic, Penile and Glanular epispadias.

Results and discussion: We are here demonstrating a video of glanular epispadias in a 21-year-old male who presented with glanular epispadias. Correction was sought by Incorporated glanuloplasty and advancement meatal (IPGAM) for forward stream and partial penile disassembly (modified Cantwell Ransley operation). Partial disassembly was done by Separation of all three corpora except at glans followed by Urethroplasty over 10 Fr feeding tube with ventral transposition of urethra and internal rotation of the corpora. We had very satisfactory results in long term follow-up. Out of these, only 2 cases developed urethrocutaneous fistula and 1 had wound infection. However, 5 patients had to undergo Bladder neck repair and ureteric reimplantation owing to incontinence.

Conclusion: It is a rare anomaly which requires meticulous dissection and preservation of neurovascular bundles. Aesthetically acceptable penis should be kept in mind while performing the procedure. Management of incontinence and reflux should be staged and continence should be the ultimate goal after the procedure.
Common sheath reimplantation for ectopic ureterocele in duplication
Dr R Singh, Dr K Natarajan, Dr R Babu
Sri Ramchandra Institute, Chennai

Introduction and Objective: When there is reflux into functioning moieties of duplication, a common sheath reimplantation is performed. We describe herewith with video our technique of reimplantation of duplication after excision of ectopic ureterocele.

Methods: Three patients with refluxing duplication anomalies (n=3) underwent the procedure. The procedure involved transvesical mobilization of duplex ureter in common sheath. The bladder mucosa and detrusor were incised cranially for 2-3cm. The ureteric hiatus was transposed superolaterally under vision and detrusorraphy was performed beneath. The ureteric orifice was placed back in native position and mucosa was closed over it.

All patients were followed up one year after surgery with ultrasonogram, VCUG and renogram. Postoperative parameters were compared with pre operative values.

Results: All three were female children who underwent the procedure between 12-18 months of age. The indications were recurrent UTI in all patients. The mean duration of surgery was 90 minutes. At 1 year follow-up none of the patient had reflux on VCUG. A diuretic renogram revealed improved drainage in all patients; the split renal function was static in all patients with no deterioration. The ureteric diameter and APD improved after surgery.

Conclusion: Common sheath reimplantation for ectopic ureterocele can be performed using the technique described safely. The videos demonstrate presentation and technical details.

Surgical experience in a series of 5 cases of female epispadias.
Dr Mukesh C Arya, Dr Ankur Singhal, Dr Yogendra Shyoran, Dr Prabhnoor Singh, Dr Rakesh Maan, Dr Pranjal Moharjal
SPMC, Bikaner

Introduction: Female epispadias is a rare anomaly (1: 4,84,000 females). It presents with incontinence and classical clinical features. Patients with VUR and incontinence even after surgery may require ureteric reimplantation and bladder neck reconstruction.

Material and methods: We are presenting the experience of female epispadias repair in 5 cases of which 4 were subsymphyseal and 1 was retrosymphyseal. Clinical features, types, evaluation and surgical reconstruction of female epispadias will be shown.

Results and Discussion: In this video, A 6-year girl with subsymphyseal epispadias and urinary incontinence presented to us with a bifid clitoris, Flat mons, Glabrous area of skin, poorly developed labia minora, Urinary incontinence and pubic diastasis. Excision of the hairless area of skin over mons was performed after marking the diamond-shaped incision. Urethral reconstruction after excision of the patulous urethra was done to achieve continence followed by skin closure in two layers and genitoplasty for correction of the bifid clitoris. Postoperatively patients were followed out of which 2 showed total continence, two patients were socially continent and 1 was totally incontinent. A patient with total incontinence is being followed up.

Conclusion: Surgical reconstruction can achieve continence and cosmetically acceptable genitalia in female patients with an epispadias. After surgery continence continues to improve over few months to two years.

Surgical management and outcomes of complex secondary cases of hypospadias in a single stage
Dr Mukesh C Arya, Dr Ajay Gandhi, Dr Yogendra Shyoran, Dr Prabhnoor Singh, Dr Mahesh Sonwal, Dr Rambeer Singh
Bikaner

Introduction: Hypospadias is one of the most common congenital urological anomalies. In secondary hypospadias, the success rate and acceptable outcome are quite uncertain even in the best hands.

Materials and Methods: From January 2010 - December 2019, 68 patients with secondary hypospadias were done.

Results & Discussion: A substantial number of Hypospadias patients usually have late presentation even at the time of adolescence just before marriage due to lack of social awareness, poor socioeconomic status, education, medical facilities, and social taboo. Secondary cases are usually complex with scarring of the urethral plate, proximal hypospadias, loss of local tissue, ventral chordee, inadequate urethral plate and almost complete dehiscence of the previous repair.

In this video, we will demonstrate management of such a case which presented to us in adulthood with scrotal hypospadias, narrow urethral plate and chordee in a single stage using penile degloving, TIP, Snodgraft, dorsal plication, subcuticular closure of urethra, spongoplasty, blanket wrap of tunica vaginalis over the neourethra, closure of ventral dartos, glanuloplasty and meatoplasty. Post-operatively patient had no chordee, no torsion, meatus at tip of glans and a good stream of urine in follow-up.
Conclusion: An adult case with proximal hypospadias, narrow urethral plate and chordee need not be staged and can be done in a single attempt with good surgical outcomes. We also report the use of buffering layers (ventral dartos and tunica vaginalis) helps in reducing fistula rates remarkably.

MVID 04 – 06
Robot-assisted Modified Vesica Ileale Padovana (VIP) neobladder: A novel and simple technique for Robotic Intracorporeal Bladder replacement reproducing open surgical principles
Dr Utsav Shah, Dr Abhay Kumar, Dr Sanjoy Kumar Surekha, Dr Uday Pratap Singh, Dr Aneesh Srivastava
SGPGI Lucknow

Introduction and Objective: The Vesica Ileale Padovana (VIP) pouch was first described in 1989 as a technique for total bladder replacement; and over the years it gained popularity as a result of its technical simplicity and good functional outcomes. By this video, we intend to replicate the open technique of neobladder creation robotically in a case of non metastatic muscle invasive carcinoma bladder.

Methods: A 53 year old diabetic and hypertensive male who was diagnosed with muscle invasive transitional cell carcinoma of the urinary bladder, received 3 cycles of neoadjuvant chemotherapy following transurethral resection of bladder tumor. For definitive management, a robotic radical cystoprostatectomy with bilateral pelvic lymphadenectomy and intracorporeal VIP orthotopic neobladder was performed. A Da Vinci Si-system with 4 arms and 7 port access was used. Cystectomy and pelvic lymphadenectomy were performed. After confirming negative results of frozen section of proximal end of urethra and distal margin of ureters, the plan of orthotopic neobladder was proceeded upon. An ileal loop of 40 cm in length, 20 cm from the ileo-cecal valve was isolated. Adequate mobilisation of ileum was done to perform a tension free urethro-ileal anastomosis. Using an Endo GIA stapler, ileum was cut. For creation of the modified VIP pouch, a ‘U’ shaped loop using 30 cm of ileum is used. In addition, an extension of approximately 10 cm of folded ileum is added to the proximal ileal loop. The ileum is then opened on the anti-mesenteric border. The urethro-ileal anastomosis with a 3-0 barbed suture is performed after an approximation of rectoprostatic fascia. A 20 Fr Foley's catheter is placed per urethrally. The right and left ureters are generously spatulated and then separately Anastomosed directly to the lateral horns of the reservoir. Both the ureters are stented using infant feeding tubes(IFT's). A 20 Fr foley's catheter is placed per urethrally. The right and left IFT’s are brought out through two separate abdominal incisions. A 20 Fr Foley's is placed as suprapubic cystostomy (SPC). A drain is placed in front of the reservoir.

Results: Total operative time of the procedure was 412 minutes. Console time was 357 minutes. Approximately, the blood loss was 375 ml. Abdominal drain was removed on post operative day 4. Patient was discharged on postoperative day 8 with per urethral catheter, SPC and bilateral IFT's in situ. Overall, the post operative course was uneventful. PUC, SPC and bilateral IFT's were removed 3 weeks following surgery after doing a cystogram which was normal.

Conclusions: Robot assisted VIP neobladder appears to be a feasible technique for robot-assisted totally intracorporeal bladder replacement following robotic radical cystectomy.

MVID 04 – 07
Robot assisted Buccal mucosal graft ureteroplasty: A simple alternative for a complex ureteral stricture
Dr Thummala Yashaswi, Dr Ravimohan S Mavuduru, Dr Girdhar Singh Bora, Dr Anuj Yadav
PGIMER, Chandigarh

Background/Objective: Managing long-segment bilateral ureteral strictures in the mid/upper ureters is always challenging. Options include simple uretero-ureterostomy to complex ileal transposition. A Boari flap is not an option as it is difficult to bridge gap in the upper ureter. Ileal replacement of the ureteral strictures risks worsening metabolic-acidosis. A buccal mucosal graft is a safe and effective surgical technique for managing upper ureteric stricture. This video presents a robot-assisted buccal mucosa graft ureteroplasty to treat long-segment upper ureteral strictures.

Materials: 43-year-old lady presented with right flank pain. On evaluation NCCT showed right solitary kidney with hydroureteronephrosis with dilated upper ureter and no calculus. Patient underwent right DJ stenting for hydroureteronephrosis. Retrograde-pyelogram done during stent change showed narrowing in upper ureter. Further evaluation with nephrogram and retrograde-pyelogram showed upper ureteric stricture length of 4–5 cm located in the upper ureter with narrowed lumen and contrast passage through the stricture. As uretero-ureterostomy, Boari flap were not possible and ileal transposition is a morbid procedure, buccal mucosal graft ureteroplasty was planned.

Results: The graft harvested from right cheek was 50mmx12mm dimensions with harvest time of 20min. The console time was 100 minutes with blood loss of 50mL. Postoperative recovery was uneventful. The nephrostomy was clamped after 48 hours to allow imbibition and the drain was removed on subsequent day.

Conclusions: Buccal mucosa graft ureteroplasty is a well-suited alternative for reconstruction of long segment upper ureteral strictures in a complex situation.
Laparoscopic ureteric reimplantation with trans-uretero-ureterostomy: video
Dr Syed Jamal Rizvi, Dr Handa R, Dr Patel D, Dr Chandora R, Dr Kumar S, Dr Modi PR
Ahmedabad

Introduction: Ureteric strictures are a not uncommon sequel of hysterectomy, and are usually unilateral and low. We here present a case of a lady who developed bilateral diffuse lower ureteric strictures after hysterectomy. She underwent a laparoscopic right ureteric reimplant with left to right trans-uretero-ureterostomy (TUU). We present a video of the surgery and discuss the technique.

Materials and methods: A 38 year old lady presented with bilateral flank pain 6 months after undergoing hysterectomy for dysfunctional uterine bleeding. On investigation she was found to have elevated serum creatinine and bilateral hydronephrosis. Bilateral percutaneous nephrostomy was done and the creatinine reached normal levels. Further evaluation revealed bilateral diffuse lower ureteric strictures extending to the mid-ureters. The patient underwent a laparoscopic right ureteric reimplant with left to right trans-uretero-ureterostomy.

Results: Operative time was 4 hours and 30 minutes and estimated blood loss was about 300 ml. No intraoperative or postoperative complications occurred. Hospital stay was 5 days and the stents were removed at 6 weeks. At a follow-up of 18 months the patient was well with a s. creatinine of 1.4 mg%.

Conclusions: Laparoscopic trans-uretero-ureterostomy is feasible and a useful addition to the urologist’s armamentarium in situations where a ureteric reimplants is not feasible on the side of the donor ureter. It avoids use of bowel and affords the advantages of minimal access surgery to the patient. TUU can be performed even when the recipient ureter has been reimplanted.

Cystoscopic extraction of a pencil from Urinary bladder using Amplatz sheath
Dr Rochlani Tarun D, Dr Singh Kamlesh H, Dr Vyas Ankit, Dr Patwardhan Sujata K
KEM, Mumbai

Introduction: The most common cause of foreign bodies in the urinary bladder is introduction through the urethra for autoerotic stimulation. Here we present a video on the extraction of a pencil introduced inside the bladder of a young female patient using amplatz sheath.

Case presentation: An 25-year-old unmarried female presented with pelvic pain, dysuria and fever for 3 days. On evaluating detail history she revealed accidental self-insertion of a pencil through urethra before 4 days. Radiological imaging confirmed the presence of a pencil of size 11cm inside the bladder perforating the right anterosuperior wall with no contrast extravasation. Cystoscopy was performed and a 28 Fr Amplatz sheath was introduced through urethra, pencil was aligned in line and successfully extracted intact with no intraoperative complications.

Discussion: Satisfactory success rate for cystoscopic extraction of bladder FBs are between 50 and 94%. Our case is unique as there is hardly any case reported of successful extraction of a whole pencil from the bladder using Amplatz sheath. Many difficulties were faced during the procedure: 1) Ends of the pencil were penetrating into the bladder wall, 2) Transverse lie of the pencil 3) wide diameter making it very difficult to hold by the ordinary grasping instruments.

Conclusion: Linear foreign body like pencil/pen tend to be oriented transversally and likely to perforate atleast one wall of bladder. Realignment into a vertical position & manoeuvring 1 end into amplatz sheath is the procedure which can be utilised for linear FB. We describe this novel method of extraction.

A case of bilateral large renal calculi managed with laparoscopic bilateral simultaneous pyelolithotomy
Dr Niramya Pathak, Dr A Singh, Dr M Desai
MPUH, Nadiad

Introduction: Large bilateral renal calculi can be managed by various options like staged percutaneous nephrolithotomy (PCNL), Staged Endoscopic Combined Intrarenal Surgery (ECIRS), pyelolithotomy. Materials and methods: We describe a case with large bilateral renal calculus managed with by laparoscopic simultaneous bilateral pyelolithotomy. The patient demographic details, imaging findings, surgery steps, postoperative course and followup details, advantages and disadvantages of our approach and learning points are outlined in the video.

Results: Laparoscopic simultaneous bilateral pyelolithotomy in our patient had prolonged paralytic ileus in post operative period and a residual calculus was there which required further retrograde intrarenal surgery for completed stone clearance. The advantages were avoiding a staged procedure and a short hospital stay and a good stone clearance rate after a single surgery.

Conclusion: Laparoscopic simultaneous bilateral pyelolithotomy though rarely performed, is a feasible, safe and good option for patients with large bilateral renal calculi.
Bilateral foley y-v plasty for bilateral PUJ obstruction with gross hydronephrosis and secondary renal calculus in a horseshoe kidney

Dr K Seshu Mohan, Dr Surya Prakash Vaddi, Dr Datta Prasad M, Dr Jawahar B
Yashoda Hospital, Hyderabad

Introduction & Objectives: Horseshoe kidney is a renal fusion anomaly characterised by renal malrotation, variable blood supply, high insertion of the ureter, and a propensity to form ureteropelvic junction (UPJ) obstruction in up to one third of cases. We present a case of horse shoe kidney with bilateral UPJ obstruction due to high insertion of of ureter which was repaired by Foley Y-V plasty and secondary stone removal.

Methods: 54 year old female presented with complaints of bilateral loin pain of 2months duration. On evaluation with NCCT KUB found to have bilateral multiple renal calculi of 1-2cm in size with bilateral gross hydronephrosis and thinned out cortex. DTPA renogram showing GFR of 41 ml/min of left kidney and 51ml/min of right kidney. IVP showed Horseshoe kidney with gross dilatation of both the kidneys with bilateral renal calculi

Results & Observations: In view of patient symptoms left sided Pyeloplasty with secondary calculus removal and bilateral DJ stenting was planned. Intraoperatively there was high insertion of ureter noted. Through the pyelotomy secondary calculi were removed. DJ Stenting done on both sides.

Conclusions: Laparoscopic Foley YV Plasty is safe and effective technique in a horseshoe kidney with high insertion of ureter. Post-operative recovery of renal function was similar to those who underwent laparoscopic dismembered pyeloplasty.

MVID 05 – 03

Long segment iatrogenic Ureteric Strictures - 3 different laparoscopic approaches

Dr V Chandra Mohan, Dr P Ramakrishna, Dr PM Siddalingaswamy, Dr G Soundarya, Dr Manas Babu, Dr UA Hemnath, Dr Rakesh Panda
Hyderabad

Introduction & Objective: Iatrogenic ureteral injuries are the most common cause of ureteric stricture. Prompt and appropriate management is required to reduce morbidity and preserve renal function. We had 3 such challenging cases and we demonstrate in the video, the different laparoscopic surgical techniques adopted in managing them.

Materials & Methods: Case 1 - 37yr male, underwent laser lithotripsy for 2cm right lower ureteric stone, following which he developed multiple ureteric strictures. Nephrostomy was done and 6 weeks later, a laparoscopic Boari flap of 15cm length was developed up to renal pelvis. Case 2 - 34yr male, had right proximal ureteric 8mm stone, attempted RIRS elsewhere and failed. On evaluation, he had stricture with stone buried in the wall of the ureter. Laparoscopic Appendix interposition ureteroplasty was done. Case 3 - 49yr female underwent left ovarian cystectomy elsewhere, developed giant urinoma due to pan ureteric stricture. Drainage of urinoma with nephrostomy was done. Nephrostogram revealed complete ureteric stricture for which laparoscopic ileal replacement was done after 8 wks. All three patients were followed up for a mean period of 14.3months. DTPA and IVU showed good drainage with preserved function.

Conclusion: Complex laparoscopic reconstructions require expertise and should be done meticulously to avoid postoperative morbidity. The scenario becomes more challenging due to the stress concerning medicolegal issues. Appropriate technique should be adopted and pursued for encouraging results and to avoid landing up in nephrectomy.

MVID 05 – 04

Safe and efficient morcellation technique during hoelp

Dr Pankaj Bhirud, Dr Krishnamohan Ramaswami, Dr Harigovind Podiyedath
H & G centre, Calicut

Introduction & Objectives: Holmium laser enucleation of the prostate (HOLEP) is an effective treatment option for begi enlarged prostate .However, complications such as bladder mucosal injuries during morcellation slow the learning curve and prevent some urologists from learning the procedure. We present tips and tricks to perform a safe morcellation based upon experience in hoplex over last 7 years.

Materials & Methods: A retrospective review of a prospective database of all hoplex procedures performed during the period of December 2014 to April 2021 at our center was undertaken. Procedure was carried out using a pulsed 100 W holmium laser with a 550 micron end fire laser fiber, initially a 26fr continuous flow resectoscope - later 24 fr continuous flow. All patients were preoperatively assessed with ultrasound prostate volume estimation, maximum urine flow rate (q max), post void residual urine volume (PVR) assessment and international prostate symptom score(IPSS). Data were recorded for operative duration, morcellation time and all case notes were reviewed for morcellation injury

Results & Observations: Between December 2014 and April 2021, 4112 cases of HOLEP were performed at our center. Median patient age was 63.2 years. Mean time required for laser enucleation was 45.4 minutes and mean morcellation time was 11.4 min. Bladder mucosal injury (superficial) occurred in 46 patients during morcellation. A bladder irrigation system was placed only when evidence of significant post-op haematuria.
Conclusions: By taking certain precautions, morcellation can be performed quickly and safely without injuring urinary bladder wall.

MVID 05 – 05
Thulium Fiber Laser Enbloc resection of bladder tumour: Our experience of 20 cases
Dr Manas Babu B, Dr Chandra Mohan Vaddi, Dr Ramakrishna P, Dr Siddalinga Swamy PM, Dr Soundarya G, Dr Hemnath A, Dr Rakesh
Hyderabad

Introduction and Objective: Conventional TURBT has its inherent shortcomings like tumour staging errors due to insufficient assessment of the tumour depth, lack of spatial orientation of the tumour specimen and intra-op complications. Enbloc resection of bladder tumour(EBRT) is emerging as an alternative to the TURBT. Different energy sources have been utilised for EBRT like monopolar energy, bipolar energy, and Holmium (Ho:YAG) laser, Thulium (Thulium:YAG) lasers. New entrant to the list of lasers is the thulium fibre laser(TFL). We present our experience of TFL-EBRT in 10 cases.

Methods: We analysed 20 cases of superficial bladder tumours who underwent TFL-EBRT in our hospital from Jan-2020 -June 2021.

Results: Tumours size varied from 1cm - 4cm, single and multiple growths. Location varied from lateral wall, over ureteric orifice, near ureteric orifice, bladder neck, prostatic urethra, trigone. None of the patients had obturator jerk or intraop bleeding or bladder perforation. Average catheter time was 2 days, none required blood transfusions. All the cases showed muscularis propria(MP) in the specimen. one case had MP involvement. Two case were labelled as papilloma, Ta,T1 disease noted in 16 cases and 2 cases had T2 tumour.

Conclusions: TFL-EBRT is a safe and reproducible technique with the enhanced tumour analysing ability by pathologists.

MVID 05 – 06
Bilateral open transperitoneal adrenalectomy with bilateral nephron sparing surgery in VHL syndrome - technical intricacies
Dr Zain Tamboli, Dr Puneeth K, Dr Abhishek P, Dr Sureka SK, Dr Singh UP, Dr Srivastava A
SGPGI Lucknow

Introduction: Von Hippel-Lindau (VHL) syndrome involves multiple systems and pheochromocytoma is the most common adrenal tumour associated with it.

Material and method: A 47 year, male k/c/o Diabetes and hypertension presented with c/o on & off pain in right lower abdomen. Patient had 2 episodes of paroxysmal tachycardia, diaphoresis & palpitation First episode 4 years back, second episode 2 Â½ years back. H/O weight loss approx 10 kg (72 to 62 kg) over past 1 year. CECT abdomen showed a well defined heterogeneous solid mass lesion in right suprarenal region 6.4 x 6.0 x 3.7 cm. Another mass of similar morphology from medial limb of Lt. suprarenal â€”2.4 x 2.3 x 2.0 cm in size. A 9 x 8 mm non enhancing cystic lesion in distal body of pancreas, multiple small heterogeneously enhancing rounded lesions involving bilateral renal cotex. Bilateral open transperitoneal adrenalectomy with bilateral nephron sparing surgery was performed.Operative time was 130 min. warm ischaemia time was 25 minutes and 27 minutes in rt and left side respectively. Blood loss was 150 ml.post op period was uneventful and patient was discharged on post op day 5.Histopathology was confirmed to be bilateral clear cell RCC with bilateral pheochromocytoma.

Result: Using ice slush, mass clamping of hilum and intraoperative ultrasound guidance, enucleation of multiple renal masses can be done in a systematic and safe manner.

MVID 05 – 07
Thulium laser partial glansectomy - a novel application of the thulium laser
Dr Sathaye S, Dr Barua S
Guwahati medical College, Guwahati

Introduction and Objective: Surgical treatment of penile cancer is guided by the following principle: as much organ preservation as possible and as much radicality as necessary. In case of superficial tumors of the glans which are limited to the epithelium (pTis, pTa), the glans is generally spared. Current recommendations allow very narrow tumor-negative margins as long as a complete excision of the tumor is achieved. The thulium laser offers high tissue coagulation capacity and precise tissue incisions. These properties of the thulium laser can be utilized for penis-preserving surgeries in penile cancer.

Methods: A 40 years-old circumcised male smoker with a 3x3 cm ulcerative growth over the ventral glans and palpable mobile bilateral inguinal lymph nodes was diagnosed on biopsy with a well-differentiated squamous cell carcinoma without lymphovascular invasion and contrast-enhanced MRI showed the corpora cavernosa, spongiosum and urethra to be uninvolved. The patient was subjected to thulium laser partial glansectomy with bilateral modified inguinal lymph node dissection.
Results: The patient had an uneventful post-operative recovery. Catheter was removed at two weeks. The excision site is healthy and recurrence free at one and half years of follow-up and the patient voids well via a hypospadiac meatus. Inguinal wounds are healthy. The patient has a satisfactory sexual life.

Conclusion: The thulium laser, with its precise incision of tissues, good haemostasis and healthy post-operative scarring, is a viable option for local excision of pTis and pT1a penile cancers, with good oncological, aesthetic and functional outcomes in the present case.

MVID 05 – 08
A modified technique of video endoscopic inguinal lymphadenectomy - deep-first approach
Dr Pandey A, Dr Das MK, Dr Mandal S, Dr Nayak P, Dr Kumaraswamy S, Dr Misra A,
Dr Gaur AS
AIIMS, Bhubaneswar

Introduction and Objective: Inguinal lymph node dissection (ILND) is the standard of care in evaluating and treating lymph nodal metastasis in penile carcinoma. Video endoscopic inguinal lymphadenectomy (VEIL) has emerged as a less morbid alternative with similar oncologic outcomes. We describe a modified technique of VEIL with the proposed benefits of a shallow learning curve and better ergonomics.

Methods: We describe our modified VEIL technique in a squamous cell carcinoma penis patient with a pathological T3 disease and bilateral palpable, mobile inguinal lymph nodes post penectomy.

Results: The surface markings and the port incision sites for the procedure were conventional. However, in contrast to the standard superficial dissection plane development below the Scarpa’s fascia at the initial camera port site, our technique commenced with a deep dissection plane above the fascia lata. The dissection limits were the sartorius muscle laterally, the inguinal ligament superiorly, and the adductor longus muscle medially. The saphenous vein was identified early and close to the saphenofemoral junction, allowing undemanding dissection. The superficial flap dissection was done entirely under direct vision, followed by a deep inguinal nodal dissection to conclude the procedure.

Conclusions: The described technique is surmised to be easier to perform, given the lack of ambiguity in the correct initial dissection plane, direct visualization of surgical landmarks early in the procedure, and early identification of the saphenous vein close to the SFJ. It may improve the learning curve allowing for a wider acceptance of VEIL.

MVID 05 – 09
Laparoscopic left partial nephrectomy in multiple ipsilateral renal tumors
Dr Misra A, Dr Das MK, Dr Mandal S, Dr Nayak P, Dr Agrawal S, Dr Kumaraswamy S,
Dr Gaur AS
AIIMS, Bhubaneswar

Introduction and Objective: Partial nephrectomy (PN) in a patient with multiple ipsilateral renal tumors (MIRT) has become the standard of care. Longer warm ischemia time (WIT) is associated with poorer renal function. The duration of safe WIT is controversial. Advancements in techniques, such as transient renal hilar control, selective and sequential clamping, zero ischemia, and off-clamp PN, have been developed with a common goal of reducing the WIT. We present a case of MIRT in which intermittent clamping of the renal pedicle was performed to decrease the WIT during laparoscopic PN.

Methods: The case presented with an incidental detection of two ipsilateral renal masses. The contrast-enhanced computed tomography (CECT) scan of the abdomen characterized the upper polar mass as a 2.5 x 2.7 cm, Bosniak III lesion with R.E.N.A.L.-4p and the lower polar mass as a 1.5 x 1.5 cm, Bosniak III lesion with R.E.N.A.L.-7x. An ultrasound-guided biopsy from the lower polar lesion was reported as clear cell renal cell carcinoma. The patient was offered a laparoscopic PN. At three-month telephonic follow-up, laboratory parameters were normal.

Results: With intermittent clamping, the WIT was divided into 20 minutes for the upper polar mass and 15 minutes for the lower polar mass with a de-clamped period of 25 minutes in between. The operative time was three hours.

Conclusions: Intermittent clamping was used to bring down the WIT. Exposure to intermittent ischemia may not be as harmful as traditionally taught. It is suitable for reducing ischemia-related injury in MIRT in resource-limited settings.

MVID 06 – 01
Risk reduction and tunnelling strategies during Brachio-Basilic transposition arterio-venous fistula: a video demonstration
Dr Abhishek Singh, Dr Rohan Sharma, Dr Ankush Puri, Dr Arvind Ganpule, Dr Ravindra Sabnis, Dr Mahesh Desai
MPUH, Nadiad
Introduction: Brachio-Basilic Transposition (BBT) is an alternative procedure to achieve native Arterio-venous patency for patients who have poor calibre superficial veins and history of multiple vascular access failure for HD. Here we describe Risk Reduction strategies to improve primary patency rate of BBT via video demonstration.

Methods: Ten patients underwent Brachio- Basilic transposition (BBT) arterio-venous fistula using the proposed risk reduction strategies. All procedures were done as a single stage procedure under regional anaesthesia at our institute. The procedure involves dissecting out the Basilic vein throughout its course upto upper 1/3rd of arm, superficialization of the vein and Anastomosing with brachial artery. We also describe use of Amplatz sheath used for percutaneous nephrolithotomy to superficialize the Basilic Vein.

Results: Ten patients underwent BBT following our risk reduction strategy protocol. Mean age of patient who underwent the procedure was 50.2 years with Male: female ratio 6:4. Mean Basilic vein diameter was 2.98 mm. None of patient had primary surgical failure. Four patients developed upper limb oedema, which was managed conservatively. Immediate post op exploration was required in one patient requiring Haematoma evacuation at the incision site. One patient required balloon angioplasty for a juxta-anastomotic narrowing . One secondary failure occurred after 4 months of fistula use due to long segment thrombosis. Reoperation rate was 22.2%. At the end of one year, 88.8% of the fistula were still patent and used for maintenance HD.

Conclusions: The risk reduction strategies have the potential to prevent primary surgical failure of BBT and decrease complication.

MVID 06 – 02
Surgical repair of anastomotic pseudoaneurysm after robot assisted kidney transplantation
Dr Subhash Kataria, Dr P Modi, Dr J Rizvi, Dr S Kumar
IKDRC ITS, Ahmedabad

Introduction and Objectives: Anastomotic pseudoaneurysm following renal transplantation is very rare 0.3%. Small pseudoaneurysms can be managed conservatively, while infected or large ones (> 2cm) require treatment to prevent rupture. Therapeutic options include conventional open repair (OR), endovascular repair (EVR), and ultrasound-guided percutaneous thrombin injection (USG-PT). Our aim is to report our technique of surgical repair of anastomotic pseudoaneurysm in a graft kidney with multiple vessels.

Methods: In our institute 550 robotic renal transplants were performed from Jan 2013 to June 2021. Vascular complications were observed in 0.058% patients. Pseudoaneurysm occurred in only one patient (0.001%). A 22-year-old male patient received a double renal artery left kidney from his father. Pantaloon anastomosis of donor arteries followed by end to side anastomosis to external iliac artery was performed. One week after transplant patient was readmitted with Left epididymo-orchitis â€” managed conservatively with antibiotics. His renal function was normal. On routine graft Doppler, we found a 15 x 11-mm pseudoaneurysm at the site of anastomosis, confirmed by angiography.

Results: Out of 32 patients with vascular complications, only one patient developed pseudoaneurysm. After confirmation of diagnosis we did pseudoaneurysm excision and repair. No recurrence was found on follow-up graft Doppler after one month. Biopsy confirmed our diagnosis.

Conclusions: The development of an anastomotic pseudoaneurysm is a very rare complication. Since graft Doppler is routinely used, a pseudoaneurysm can be easily detected. A pseudoaneurysm after renal transplant often causes a loss of the graft, but fortunately we did pseudoaneurysm excision and repair.

MVID 06 – 03
Percutaneous management of a recurrent renal fungal ball mimicking a staghorn calculus
Dr Kumaraswamy S, Dr Das MK, Dr Mandal S, Dr Nayak P, Dr Pandey A, Dr Agrawal S, Dr Gaur AS
AIIMS, Bhubaneswar

Introduction and objective: Renal fungal balls are rare and form in severely immunocompromised individuals. Prompt recognition and early complete surgical removal of the fungal ball is the cornerstone of treatment.

Methods: We present a case of a 23-year-old gentlelman without any known comorbidities who had undergone endoscopic removal of left renal calculus elsewhere twice in the last year. He presented to us with recurrent left staghorn calculus. On gaining access for PCNL, floppy material was seen that was cleared with forceps extraction and suction. The patient was discharged on oral fluconazole 200mg OD for a month. He reported back after three months with a large staghorn calculus in the left kidney. The patient was taken up for complete percutaneous removal with a high suspicion of a recurrent fungal ball. The soft fungal ball was evacuated in a piecemeal fashion and using suction. A flexible renoscopy at the end of the procedure confirmed the complete evacuation. Slow fluconazole instillation (300mg in 500 ml saline) over 12 hours was done through the nephrostomy for seven days. Detailed workup did not show an immunocompromised state. The postoperative course was uneventful, and he was discharged on oral fluconazole 200mg/day for a month.

Results: The patient was asymptomatic after one month. The ultrasound did not show any recurrence of the fungal ball. DJ stent was removed, and the patient is doing well.

Conclusion: A strong suspicion with timely complete surgical removal and antifungal drug administration can prevent a fulminating invasive fungal disease.
Severe kyphoscoliosis with fused spine: a challenge to prone PCNL

Dr Yadav Subhash, Dr Bali Deepak
Anand Hospital, Meerut

Introduction: Patients with severe skeletal deformities are a challenging group to treat. Prone position is challenging in morbidly obese patients, patients with structural spinal deformities and with serious cardiopulmonary diseases. Therefore, different positions are adopted by the urologists like the supine, modified supine and Galdakao-modified supine Valdivia (GMSV) positions.

We present the case of a 60 year old male patient with severe kyphoscoliosis and fused spine with right renal pelvic stone of many years duration. He was refused surgery at many centres due to severe spinal deformity. The patient underwent prone tubeless MPCNL with complete stone clearance and no post op complications.

Result: In patients with severe kyphoscoliosis and fused spine we have seen the feasibility and effectiveness of tubeless Mini PCNL to remove the renal calculi.

Conclusion: Even in Patients with spinal deformities where majority of Urologist are not regularly doing supine PCNL, standard Prone PCNL is feasible and provides excellent results with little difficulties.

Moderated Poster Session 1

MOD POS 01 – 01
A prospective study on application of enhanced recovery after surgery protocol in uro-oncology

Dr Patawari Piyush Kumar, Dr Dey Sumantra, Dr Alam Tahzeeb, Dr Molla Wasim, Dr Sharma Pramod Kumar, Dr Mandal Soumendranath
Calcutta National Medical College & Hospital, Kolkata

Introduction - Surgical treatment for Carcinoma of Urinary Bladder, Prostate, Kidney and Ureter remains the standard of care. Certain principles, such as preoperative mechanical bowel preparation and postoperative fasting were based on surgical dogma and have been proven not to provide any postoperative benefit. Enhanced recovery after surgery (ERAS) protocols pioneered by Kehlet, describe a coordinated approach to the delivery of best evidence-based postoperative practice for patients undergoing major uro-oncological surgery. Its role is being explored in urological surgeries recently.

Methods - We conducted a Prospective case control study involving Patients with Carcinoma of Urinary Bladder, Prostate, Kidney and Ureter admitted in Urology department during the April 2020 to April 2021 with 25 cases in both study and control group. The primary objective was to compare mean post operative pain score, time to flatus and duration of hospital stay, and readmission at 30 days between both groups. Post-operative complications were also compared using the Clavien-dindo classification system.

Results - Patients following ERAS had a significantly shorter mean hospital stay (8 days versus 12 days) and mean time to flatus (1 day versus 2 days) than patients in control group. No major complications grade iii or above as per clavien-dindo classification were reported. Both group had comparable postoperative pain scores. There was 1 readmission in both the groups within 30 days postoperative due to electrolyte imbalance.

Conclusions: This study shows the feasibility of ERAS protocol with evidence of significant benefits with similar complication rates against control group

MOD POS 01 – 02
Analysing real-life Indian data on frequent treatment sequences for the management of metastatic prostate cancer via machine learning

Dr Jiten Jaipuria, Dr SK Rawal, Dr A Singh, Dr G Sharma, Ms I Kaur
Rajiv Gandhi Cancer Institute and Research Centre, Delhi

Introduction and objective: The burden of prostate cancer is increasing. A significant number of patients present with metastatic disease and all are initially prescribed androgen deprivation therapy (ADT). However, subsequent optimal sequences of treatments to improve overall survival (OS) remains an area of active investigation. We analyzed real-life data of patients with hormone-sensitive metastatic prostate cancer to determine which set of treatment sequences were associated with improved 3-year overall survival via machine learning.

Methods: Data of 384 patients diagnosed with de-novo metastatic prostate cancer from 2011-2015 to a tertiary cancer center was collected. Patients were categorized into groups of survived and deceased at the end of three years. Modified sequence pattern mining techniques [GSP (Generalized Sequential Pattern Mining) and SPADE (Sequential Pattern Discovery using Equivalence Classes)] were applied to discover the exact order of frequent set of treatments in either group.

Results: Initial androgen deprivation therapy (ADT) via Degarelix was uniquely found in the survived group. Better OS was found associated with the sequence of ADT followed by abiraterone followed by docetaxel. Patients who needed chemotherapy and radiation in any sequence were frequent in the deceased group.
Conclusions: We identified unique treatment sequences discriminating survived and deceased groups of patients at the end of three years. Patients given Degarelix followed by abiraterone followed by chemotherapy fared better. Those needing palliative radiation and chemotherapy in any sequence fared worse, thus illustrating a prognostic role for this sequence pattern.

MOD POS 01 – 03
Correlation of MRI-estimated vi-rads score with muscle invasiveness on TURBT in patients with urothelial bladder cancer - our preliminary report
Dr Sathaye S, Dr Rajeev TP, Dr Barua S, Dr Bagchi P, Dr Phukan M, Dr Sarma D
Guwahati Medical College, Guwahati

Introduction and Objective: Bladder cancer (BC) is the fourth most common cancer in men, but is less common in women. It has the highest recurrence rate of any malignancy. While non-muscle-invasive BCs (NMIBCs) are often low grade and have an indolent natural history, muscle-invasive BCs (MIBCs) are aggressive tumors with an ominous prognosis. Recently, VI-RADS (Vesical Imaging Reporting and Data System), a non-invasive multi-parametric MRI (mpMRI) based scoring system has been used for predicting MIBC. The objective of the study is to prospectively validate VI-RADS for pre-operative discrimination between NMIBC and MIBC.

Methods: Patients with BC suspicion are offered mpMRI before transurethral resection of bladder tumor (TURBT). According to VI-RADS, a cut-off of ≥3 is taken to define MIBC is assumed. TURBT reports are compared with pre-operative VI-RADS scores to assess accuracy of mpMRI for discriminating between NMIBC and MIBC. Sensitivity, specificity, positive (PPV) and negative predictive values (NPV) are calculated for mpMRI performance in patients undergoing TURBT.

Results: 20 patients have been enrolled in the study so far. mpMRI showed sensitivity, specificity, PPV and NPV for discriminating NMIBC from MIBC at initial TURBT of 88.9%, 36.4%, 53.3% and 80% respectively.

Conclusions: The interim results differ from the previous studies on the subject. The VI-RADS score seems to be unreliable as the sole diagnostic tool for discriminating NMIBC from MIBC. While further results are awaited, if present results are anything to go by, mpMRI is far from replacing TURBT with deep muscle biopsy for discriminating NMIBC from MIBC.

MOD POS 01 – 04
Neoadjuvant chemotherapy followed by cystectomy: A single centre experience
Dr Shashank Patil, Dr Vikram Prabha, Dr RB Nerli, Dr Shridhar C Ghagane
JNMC, Belagavi

Introduction: Nearly 50% of patients with muscle-invasive bladder cancer treated with cystectomy alone will progress to metastatic disease. Surgery alone is not sufficient therapy in a large number of patients with invasive bladder cancer. Systemic therapy with cisplatin-based chemotherapy has been shown to provide response rates in several bladder cancer studies. Multiple randomized controlled studies defined further effectiveness of neoadjuvant cisplatin-based chemotherapy in advance of cystectomy. We have retrospectively reviewed our series of patients who underwent neoadjuvant chemotherapy followed by radical cystectomy for muscle invasive disease.

Materials & Methods: Between Jan 2005 - Dec 2019, 72 patients underwent radical cystectomy following neoadjuvant chemotherapy over a 15-year period Jan 2005 - Dec 2019. The data was retrospectively collected and analysed.

Results: The median age was 59.84±8.967 years (range, 43 to 74), and the ratio of male to female patients was 5:1. Of the 72 patients 14 (19.44%) completed all the three cycles, 52 (72.22%) completed at least two cycles and the remaining 6 (8.33%) completed only one cycle of neoadjuvant chemotherapy. A total of 36 (50%) patients died during the follow-up period. The mean and median survival of the patients was 84.85±4.25 months and 91.0±5.83 months respectively.

Conclusions: Neoadjuvant M-VAC should be offered to patients with locally advanced bladder cancer and who are candidates for radical cystectomy. It is safe and effective in patients with adequate renal function. The patients need to be carefully monitored for chemotherapy-induced toxic effects, and appropriate intervention is necessary in the event of severe adverse effects.

MOD POS 01 – 05
Predictors of bladder recurrence in post radical nephroureterectomy in upper tract urothelial carcinoma: a single tertiary care centre experience
Dr Pathrose G, Dr John NT, Dr George AJP, Dr Mukha RP, Dr Devasia A, Dr Kumar S
CMC Vellore

Objectives: To identify factors associated with bladder recurrences following Radical Nephroureterectomy (RNU) for Upper tract urothelial carcinoma (UTUC).

Introduction: Radical nephroureterectomy with bladder cuff excision is the standard of care treatment of UTUC. Intravesical recurrence after RNU is a frequent event that can occur in 20-50 % of cases.
Methodology: We retrospectively reviewed 82 patients with pathologically proven UTUC who underwent radical nephroureterectomy at our Institution from 2009 and 2019 using hospital database. Patients with concomitant high grade bladder cancer, less than 1 year of follow up, those undergoing radical cystectomy and distant metastasis were excluded. Univariate analysis by log-rank test and multivariate analysis by Cox proportional hazard values were used to determine risk factors.

Results: Overall 18(22%) patients out of 82 with a mean age of 54.3(+/- 4.6) years experienced intravesical recurrence at a mean follow time of 14.4(+/-3.2) months. On univariate analysis, higher tumor stage, grade, smoking more than 10 years, LVI. CIS, absence of MMC instillation and neoadjuvant were associated with higher rate of bladder recurrence. But on multivariate only high tumor stage (HR 1.818 C.I 1.046- 2.95 p= 0.033), grade (HR1.274 C.I 1.001-1.62 p=0.049), concomitant CIS (HR 2.17 C.I 1.11-4.26 p=0.02) and Lymph node status (HR 2.008 C.I1.008-3.748 p= 0.023) was associated with increased bladder recurrences.

Conclusion: In our series, there was a 22% incidence of bladder recurrence in patients undergoing RNU. High tumor stage, grade, concomitant CIS and Lymph node status was associated with increased bladder recurrences.

MOD POS 01 – 08
Retroperitoneoscopic Adrenalectomy
Dr Spurthi V, Dr Pranjali Modi, Dr Syed Jamal Rizvi, Dr Suresh Kumar
Inverted urothelial papilloma of prostatic urethra nearly misdiagnosed as urothelial carcinoma - a case report

Dr Pandey A, Dr Mandal S, Dr Das MK, Dr Nayak P, Dr Kumarswamy S, Dr Rohith G, Dr Agrawal S
AIIMS, Bhubaneswar

Introduction and Objective: Inverted urothelial papilloma (IUP) is a rare benign urothelial neoplasm usually involving the trigone, bladder neck, and prostatic urethra, occasionally presenting as a polypoidal mass causing obstructive symptoms. We intend to elucidate the diagnostic dilemma between IUP and urothelial carcinoma and its implications.

Methods: We present our experience with a patient with obstructing IUP of the prostatic urethra, initially misdiagnosed as urothelial carcinoma.

Results: A 48-year male presented to our outpatient with obstructive symptoms of one-year duration, and uroflowmetry showed a maximum flow rate of 4.5 mL/s. Cystourethroscopy revealed a 1.0 cm pedunculated, polypoidal lesion arising from the prostatic urethra, for which transurethral resection was done. Histopathology was reported as low-grade urothelial carcinoma because of transitional cells with nuclear atypia. Re-evaluation of histopathology was requested given the location and cystoscopic appearance of the lesion. It revealed a miscommunication during the initial evaluation, the pathologist being unaware of the tumor location and cystoscopic appearance. The lesion was finally diagnosed as IUP, considering the absence of mitoses and the presence of focal squamous metaplasia. There was no recurrence during the one-year follow-up. The patient safely evaded close follow-up and check cystoscopy visits.

Conclusions: Resection is curative for IUP, and stringent surveillance protocols are not required. Active communication between urologists and pathologists may prevent misdiagnoses of this rare entity, especially when atypical changes are present.
MOD POS 01 – 11
Post TURP decline in total serum PSA level and its correlation with resected volume of prostate in BPH

Dr Koushal Kondawar, KIMS, Trivandrum

Thesis: Prevalence BPH rises markedly with age, 8%, 50% and 80% in 4th, 6th and 9th decade of life. Benign Prostatic Hyperplasia (BPH) is the most prevalent prostatic pathology, and TURP is one of the surgeries most commonly performed by urologist, and is considered the gold standard for surgical treatment of BPH. Prostate size can be estimated by Transrectal Ultrasound (TRUS). Knowledge of prostate size may be clinically relevant in terms of selecting appropriate medical and surgical therapy. A strong correlation exist between serum prostate specific antigen levels and prostate volume and as a consequence, the PSA may be used as surrogate for prostate volume. The transition zone volume can be quantified using transrectal ultrasonography. Serum PSA level is directly related with volume of prostate and age of patient. Prostate Specific Antigen (PSA) is a tumor marker whose role in the diagnosis and follow up of patients with prostatic disease is continuously evolved. It is known that serum PSA level decrease gradually reaching stable value within 2 to 6 months. Serum PSA stabilization apparently depends on several factors, namely, patients age, PSA levels before surgery, prostate volume and prostate volume resected. An approximate 72% decrease from the baseline is expected, even with a proportionally lower reduction in prostate volume. This occurs because resection affects basically the transitional zone of prostate, which produces more PSA per gram of tissue. In this study, we analyzed how total PSA change with time in patients with BPH who undergo TURP.

MOD POS 02 – 01
60W Superpulse Thulium fiber laser in RIRS - Efficacy in hard vs soft stones

Dr Sounarya Ganeshan, Dr V.Chandramohan, Dr P.Ramakrishna, Dr Siddalingaswami PM, Dr Hemnath U.A, Dr. Manas Babu, Dr. Rakesh Panda

Preeti Urology & Kidney Hospital, Hyderabad

Introduction & Objective: Thulium fibre laser has been producing promising results in preclinical studies. Aim of the study is to evaluate its efficacy in the clinical setting across various stone densities.

Materials & Methods: A prospective study from August 2019 to May 2021 was done on 185 patients, with single renal/proximal ureteral stones less than 20mm, who underwent RIRS with 60W Superpulse Thulium fibre laser (Urolase SP+, IPG Photonics, Oxford, Massachusetts). Stone parameters, laser on time, total energy (KJ) used were recorded. Patients were divided based on stone density into Group A (<1000HU), Group B (>1000HU). Laser efficacy (J/mm3) and ablation speed (mm3/sec) were calculated and compared between the two groups. Ethical committee approval obtained.

Results: Mean stone size was 14.4 ± 4.8 (Group A) vs 12.6 ± 2.3mm (Group B). Mean stone volume was 2540 ± 1320 mm3 vs 1740 ± 1130 mm3. Mean stone density was 826 ± 106HU vs 1190 ± 128HU. Mean laser on time was 20.8 ± 9.4 min vs 28.6 ± 8.1min. Total energy consumed was 18.8 ± 9.8 KJ vs 19.1 ± 3.43 KJ. Mean laser efficacy was 8.8 ± 5.54 vs 16.1 ± 8.9 J/mm3. Mean ablation speed was 2.5 ± 1.8 vs 1.7 ± 1.6 mm3/sec.

Conclusion: TFL works well across different stone densities. Ablation speed was significantly higher and laser on time was significantly lower in less dense stone group. Significantly Less energy per mm3 of stone was required for less dense stone group.

MOD POS 02 – 02
A Single Center Prospective Randomized Controlled Study To Assess Outcomes And Complications Of Conventional Stent Placement Versus No Stent Placement After Ureteroscopy For Distal Ureteric Calculus Of Size Less Than 1 cms.

Dr Sural Jayadeva Reddy, Dr. Arun Chawla, Dr. Sourabh

KMC Manipal

Objectives: To compare the outcomes with respect to LUTS, sexual dysfunction and complications who undergo stent placement versus no stent placement following ureteroscopic lithotripsy for distal ureteric calculus. Methods: 104 cases including both sexes diagnosed with distal ureteric calculus were randomized into 2 groups by using computer generated randomization, as per group 1 and 2. Group 1 underwent stent placement after ureteroscopy and group 2 were not stented. Preoperative and Intraoperative data regarding stone size and location were noted and the PULS (Post Ureteroscopic Lesion Score) was noted. All patients were asked to fill the IPSS questionnaire (for evaluation of LUTS) and FSFI/IIEF-5 (for evaluation of sexual dysfunction) before the procedure and 4 weeks at the time of stent removal/follow up. Results: The results of the VAS for flank pain, urgency, frequency, haematuria, and suprapubic pain showed a significant difference at all time-points of follow-up, being significantly higher in groups 1 compared to Group 2 (p<0.001). Group 1 had a worse total IPSS (p=0.02), intermittency (p=0.009), urgency (p=0.008), voiding symptoms (p=0.046), and storage symptoms (p=0.017) subscores on the IPSS. The pre-and postoperative mean IIEF-5 scores were 23.86 ± 1.26 and 20.57 ± 2.48 (p=0.19) in males and the mean FSFI scores were 13.58 ± 1.46 and 14.46 ± 1.52 (p=0.41), respectively in females.
Conclusion: DJ stent placement appears to be unnecessary post 'uncomplicated' Ureterorenoscopy thereby reducing the bothersome LUTS. DJ stenting seems to have negative effect on sexual function in both males and females, but deteriorations of sexual function is temporary and whenever possible, DJ stents should be avoided.

MOD POS 02 – 03
A study on management of ureteric colic in a tertiary care center
Dr Sadhan Kumar Gh, Dr T. Narendar, Dr Vinay Kumar Reddy, Dr PVLN Murthy
KIIMS, Trivandrum

Introduction And Objectives: Ureteric colic presents as acute colicky flank pain radiating to groin most commonly occurs due to obstruction of ureter by calculi. Ureteric colic is a common condition in our area. The objective is to study the outcome of ureteric colic patients with calculi and to assess different treatment methods.

Methods: From Dec 2019 to June 2021, 110 patients presented to urology department with ureteric colic due to calculi diagnosed by non-contrast computed tomography. The colic pain was initially managed with NASIDs and alpha-blocker. Multimodality interventions (DJ Stenting, URSL, pushback PCNL, RIRS) were used as surgical treatment.

Results: The total number of patients were 110 with male predominance (64%) and age range between 7 to 66 years. Overall 61(55%) patients were treated conservatively and 49(45%) patients underwent urological interventions. All patients with stone size less than 5mm were managed conservatively (36/110; 100%). Recurrence rate of conservatively treated ureteric colic patients were 34%. Patients with stone size of 6mm-10mm (28/53; 53%) and >10mm (21/21; 100%) underwent surgical intervention. Seventy-two percent of upper ureteric, 86% of mid ureteric and 34% lower ureteric calculi were required intervention (p-value<0.001). Sixty-six percentage of Patients with more than 1 mg/dl serum creatinine and 88% of patients with leucocyte count >11000cells/cumm had necessitated surgical treatment (P value<0.001).

Conclusion: Significant factors for surgical intervention were stone size >10mm (100%), upper ureteric calculi (72%), creatinine value >1 mg/dl (66%) and leucocyte count >11000cells/cumm (88%).

MOD POS 02 – 04
Chyluria - Clinical study and its relation to hyperlipidemia
Dr Mallipeddi Partha Sri, Dr D Sreedhar
Dr PSIMS and RF, Vijayawada

Introduction and Objective: Chyluria is defined as presence of Chyle in the Urine. Chyle is composed of albumin, emulsified fat and fibrin. Chyluria is caused by lymphourinary reflux through fistulous communications secondary to obstruction or regurgitation. This study intends to look for etiopathogenesis, management and its correlation to hyperlipidemia.

Material and Methods: Here we are reporting ten cases of chyluria. All the cases were evaluated for lipid profile along with necessary investigations and treatment given accordingly. It's diagnosed by evaluating a sample of a postprandial urine for chylomicrons and triglycerides. Peripheral smear and ELISA testing were used for detection of microfilaria.

Results: Five cases(50%) found to have hyperlipidaemia, three cases(30%) with W. Bancrofti and were treated using DEC and one case(10%) was secondary to TB and resolved after giving ATT. One case(10%) of Haematolchyluria was secondary to Trauma. Four cases(40%) remained refractory and in two cases(20%) recurrence is found after conservative management. These cases were treated using Endoscopic Instillation of 0.2% povidone iodine.

Conclusion: Hyperlipidemia is often neglected. Treating Chyluria as a systemic disease helps to decrease the recurrences. The initial treatment comprises dietary modification and medical management. Non-responders and recurrences are usually treated with endoscopic retrograde renal instillation sclerotherapy. The natural history of this chronic condition is still unclear and the treating urologist must be well versed with its etiopathogenesis, diagnosis and management to prevent some of the later sequels. Refractory cases may require Lymphovenous disconnection or auto transplantation.

MOD POS 02 – 05
DJ-Stenting in Emphysematous pyelonephritis: A single center experience
Dr Chintalapani Vishwajith Reddy, Dr D Sreedhar
Dr PSIMS and RF, Vijayawada

Introduction: Emphysematous pyelonephritis (EPN) is a severe and life-threatening necrotising infection of the kidney characterised by the presence of gas in the parenchymal tissue and pelvi calyceal system. The mortality rate for EPN is as high as 25%. We present the retrospective analysis of clinical profiles and Outcomes of a series of patients with EPN who were managed either, medically or with early Double J stenting (DJ) between June 2016 and June 2021 at Dr. Pinnamaneni Siddhartha Institute of Medical Sciences And Research Foundation.
Introduction and Objective: Percutaneous Nephrolithotomy (PCNL) is an established gold standard treatment modality for renal calculi of size > 2 cm. While several positions for PCNL have been practiced, prone position has been favoured by majority of urologists due to familiarity with the procedure. However difficulty in obtaining combined retrograde and antegrade access to the renal cavities when needed and anaesthetic complications remain a concern of prone PCNL due to which supine PCNL is gaining acceptance worldwide. We therefore aimed to evaluate the safety, efficacy and outcomes of patients with renal calculi of >2cm undergoing PCNL in supine or prone position.

Methods: Between January 2019 and January 2021, patients with renal calculi of > 2 cm satisfying the eligibility criteria were randomized to undergo fluoroscopy guided PCNL either in the prone or supine position. The groups were compared for baseline characteristics, puncture position, numbers of punctures, operative time, stone free rates (SFR), intraoperative and perioperative complications and duration of hospital stay. A p value of <0.05 was considered statistically significant.

Results: 106 patients underwent PCNL with 53 each undergoing either supine or prone PCNL. Mean age was 41 years and the mean stone size was 2.36cm. There were no significant differences in gender, age, body mass index, stone location, stone size and the presence of hydronephrosis between the two groups. Although SFR, mean operative time and hospital stay was statistically insignificant, a higher mean blood loss with need for transfusion was noted in the prone PCNL group.

Conclusion: Both prone and supine PCNL have comparable outcomes in terms of SFR. However supine PCNL demonstrated decreased need for perioperative blood transfusion with better safety profile.

MOD POS 02 – 07
Evaluating the outcome of PCNL patients using GUY’S STONE SCORE vs Seoul National University Renal Stone Complexity Scoring System - A retrospective study
Dr Siddharth Jai Singh
Dr DY Patil Medical College and Hospital, Pune

Introduction: Percutaneous nephrolithotomy (PCNL) is an important modality in the armamentarium of urologists and is gold standard for the treatment of large and complex renal stones with its success dependent on several variables.

Objective: To compare the predictability of Guy’s Stone Score (GSS) and Seoul National University Renal Stone Complexity (S-ReSC) scoring system in the evaluation and outcome of PCNL patients.

Methods: This is a retrospective study conducted in 100 subjects with renal stones. Relevant radiographic studies and hematological investigations were performed preoperatively. Patients were classified into 4 grades according to their Guy’s Stone Score (GSS) and into 3 groups according to Seoul National University Renal Stone Complexity (S-ReSC) scoring system.

Results: The mean age of our patients was 40.81 ± 14.6 years. Of 110 kidneys affected, there were 75.45% (83) solitary stones and 24.55% (27) multiple stones. 95.4% (105) were radio-opaque calculi. 4.6% (5) were radiolucent. Difference between the blood parameters before and after the surgery were insignificant. Average duration of surgery was 1.73 ± 0.85 Hrs. Mean hospital stay was 3.02 ± 0.84 days. 6 patients developed both intraoperative (bleeding) and post-operative complications, while 37 developed postoperative complications (pain, fever, hematuria, puncture site abscess). All complications were managed conservatively.

Conclusion: Based on these findings, both GSS and S-ReSC can be considered as objective, reliable and easily reproducible scales for assessing the risk of complications and success of operative procedure in patients undergoing PCNL for renal stones.

MOD POS 02 – 08
PCNL in post emphysematous pyelonephritis: review of complications classified by modified Clavien Dindo Grading System.  
Dr B Sourabh Chandra Reddy, Dr Arun Chawla, Dr Ravi KMC, Manipal

Aims And Objectives: The infective complications of PCNL in patients with emphysematous pyelonephritis EPN would be higher and be responsible for the increased morbidity. We retrospectively reviewed our hospital records of patients with EPN and renal stones undergoing PCNL, and assessed the outcome especially in relation to infection.

Methods: A retrospective comparative study was performed on prospectively kept database of patients of emphysematous pyelonephritis admitted in Kasturba Hospital from 2011 to 2021. RESULTS: Total 48 patients having EPN with renal calculi who underwent PCNL were included in the study. Mean age was (51.75 ± 6.90) years, thirty were female and eighteen patients were male. 43 patients were having diabetes mellitus and 30 of them were hypertensive too. All patients were initially managed conservatively; 30 patients underwent cystoscopy and Double J stent insertion on the affected side and 9 patients underwent PCN insertion. Six weeks later, PCNL was performed (Urine culture was negative) under cover of appropriate antibiotics and general anaesthesia. 39 (81.25%) patients had post op complications, but only 9(18.75 %) patients had class III or higher complications. 15 patients has class I , 15 patients had Class II; 6 patients had class IIIb and 3 patient had class IV complications as classified by modified Clavien-Dindo system.

Conclusion: Our study shows that after initial conservative approach followed by management of calculi has positive results. The rate of complications was higher compared to that of standard PCNL, the recovery rate is good and most of the complications are self limiting.

MOD POS 02 – 09
The efficacy of peritubal local anaesthetic infiltration in postoperative pain following percutaneous nephrolithotomy
Dr Tahzeeb Alam, Dr Pramod Kumar Sharma, Dr Sumantra Dey, Dr Piyush Kumar Patawari, Dr Soumendranath Mandal
Calcutta National Medical College & Hospital, Kolkata

Introduction and objectives: Percutaneous nephrolithotomy (PCNL) is a safe and effective endourologic procedure for renal calculi. However, a common problem is the patient complains of pain around the nephrostomy tube and demands for good postoperative analgesia. Objective is to evaluate the effectiveness of peritubal infiltration in managing postoperative pain following percutaneous nephrolithotomy in infracostal renal access PCNL patients. Materials and Methods: This is a prospective study going on from January 2021 at our department. 55 PCNL patients operated under general anaesthesia were divided into two groups, 23 patients receiving peritubal analgesic infiltration (study group) and 22 patients as the control group (no local anaesthesia). The study group received peritubal injection with 10mL of bupivacaine (0.25%). Postoperative pain as the primary outcome was assessed by using visual analogue scale at 1hr , 4 hrs and 24 hrs. The secondary outcomes were the total postoperative analgesic usage in 24 hours and time of first demand. Results: The average VAS pain at 1 hour,4 hours and 24 hours after the operation in the study group were significantly lower in the control group. Doses of analgesic usage for controlling postoperative pain and the first analgesic demand were significantly lower and longer respectively in study group. Conclusion: The peritubal local anesthetic infiltration is effective in alleviating immediate postoperative pain after percutaneous nephrolithotomy.
MOD POS 02 – 10
Is Bladder Atonia/Hypotonia - A Sequelae of COVID infection?
Dr Vaibhav Vinkare, Dr Prashant Patnaik, Dr Apoorv Shastri
Bombay Hospital, Mumbai

Purpose: To study and established a relation between post covid infection recovering patients and associated bladder atonia/hypotonia.

Material And Methods - An observational study of the patients who were covid 19 positive, and had an urinary retention during the course of hospitalisation while recovering from covid were studied and followed up closely.

Results: We studied 16 such patients who went into urinary retention while recovering from COVID infection, including both males and females. Average age was 65 years and the most common symptom was Painless urinary retention. COVID affects nerves as reported by studies, presenting as Gullian Barre syndrome and also affects blood vessels causing viral orchitis. The probability of the virus causing physiological problems is not far fetched in already vulnerable population. Of the 16 patients 14 patients recovered from the episode of atonia/hypotonia, leading to the question Is Bladder Atonia/Hypotonia A Sequelae of COVID infection?

MOD POS 02 – 11
Profile of voiding dysfunction among diabetic population.
Dr Sharma B, Dr Kochhar G, Dr Khanna R, Dr Mandal AK, Dr Verma IN, Dr Meer M, Dr Varshneya A
MMIMSR, Mullana

Introduction: Patient with diabetes mellitus and lower urinary tract symptoms may have varied presentation ranging from mild dysuria to overactivity and acontractile bladder. Diabetic cystopathy is a well-established complication along with other systemic complication like diabetic neuropathy, retinopathy and angioopathy.

Objectives: To study the urodynamic characteristics of LUTS in diabetic patients and their association with neuropathy and retinopathy

Methods: Single centre data of 31 patients who attended urology outpatient department from April 2020 to June 2021. Patients were enrolled in the study and demographic and clinical profiles were noted. Patient was subjected to physical examination with focussed neurological examination and ophthalmic evaluation by an ophthalmologist. After thorough assessment patients were subjected to multi-channel urodynamic testing and results analysed.

Results: A total of 31 patients included with mean age 53.27 (25-81) years with average 9.7 years (6-17) diabetic history and 18/31 female patients. Mean IPSS score of 11.27 with majority in moderate severity. Mean first sensation being 166.7 ml and cystometric capacity of 468.45. 12/31 patient had detrusor overactivity with or without incontinence and 13/31 patients had urinary retention. 6 patients had diabetic retinopathy and only 5 patients had clinically determined diabetic neuropathy.

Conclusion: In our study, we found out that diabetic patients can have variable presentation such as dysuria, overactivity along with classical acontractile detrusor. Patients may have other associated systemic complications like retinopathy and neuropathy. Diabetic cystopathy can be predicted in patients with neuropathy and retinopathy or vice versa.

MOD POS 03 – 01
A comparison between silodosin and tamsulosin for medical expulsive therapy of distal ureteric calculus
Dr Atif Abdullah C, Dr Gupta Yogendra Basoo, Dr Ramesh G, Dr Ananda Kumar I, Dr Senthil Kumar S, Dr Sudhakaran S, Dr Srikala Prasad T
Govt Chengalpattu Medical College

Introduction: Though there is steep rise in minimally invasive procedures, medical expulsive therapy (MET) is still regarded as an established treatment option for the management of distal ureteric stones.

Tamsulosin, an alpha 1 adrenergic receptor blocker causes ureteric muscle relaxation with maintenance of normal antegrade peristaltic activity that facilitates the passage of stones.

Silodosin is a more selective alpha 1A adrenergic receptor blocker than tamsulosin. The aim of this study was to compare the efficacy of silodosin and tamsulosin for medical expulsion of lower ureteric calculus.

Methods: It was a prospective randomized control study and included patients who presented with renal colic and radiologically diagnosed with distal ureteric calculus of size less than 10 mm. A total of 80 patients were randomized to silodosin and tamsulosin group by block randomization. Patients were reviewed every week until passage of calculus or upto 4 weeks. Primary end point was passage of calculus. Discontinuation of MET was done, when there was intractable pain or urosepsis.

Results: Stone passage rate was significantly higher in silodosin group when compared with tamsulosin group (95% vs 70%; P = 0.003). Silodosin group showed early stone expulsion time (10.15 days vs 13.4 days; P = 0.012) and reduced analgesic requirement. There was no drop out of patients due to side effects of the drugs in this study.
Conclusion: On using silodosin for medical expulsion of distal ureteric calculus, we found better stone expulsion rate, expulsion time and reduced analgesic requirement when compared with tamsulosin.

MOD POS 03 – 02
Comparison of efficacy outcome of side to side end to side radiocephalic arteriovenous fistula in patients of chronic kidney disease
Dr Vazir S Rathee, Dr Kumar Mrigank, Dr Devendra S Pawar, Dr Deepak Garg, Dr Syed Aamer, Dr Swapnil Bala
IMS, BHU, Varanasi

Chronic Kidney Disease (CKD) is a global health problem which is growing in prevalence. Hemodialysis is the most common treatment for end-stage renal disease (ESRD) which requires a permanent vascular access. Vascular accesses should have a good patency and low complication.

Objectives: The present study aimed to compare the efficacy & outcome of side-to-side (STS) versus end-to-side (ETS) methods in ESRD radiocephalic arteriovenous fistulas in dialysis patients.

Patients and Methods: In this randomized, single-blind clinical trial, 60 ESRD patients who required venous access for hemodialysis were divided equally into two groups. STS arteriovenous anastomosis was employed in one group and in the other, the ETS approach was conducted. Follow ups were done after 1, 6, and 24 weeks to detect fistula maturation and immediate or delayed complications.

Results: The STS anastomosis group demonstrated higher rates of delayed maturation, vascular aneurism, and venous hypertension syndrome than ETS anastomosis group. The ETS group, however, showed higher rates of venous thrombosis and vascular stenosis. Overall, the rate of complications was 11% and 8% for STS and ETS anastomosis group respectively (P =0.03).

Conclusion: In comparison, ETS arteriovenous fistulas involve less complications than STS method in ESRD patients. However, more thrombosis and stenosis detected by ETS method. ETS arteriovenous fistulas had less delayed maturation, aneurism, venous hypertension and overall complications than STS approach. ETS arteriovenous fistulas contributes to establishing a more stable connection to hemodialysis machine to conduct a more effective hemodialysis

MOD POS 03 – 03
Practice patterns and use of silodosin in benign prostate hyperplasia with comorbidities by Indian urologists
Dr Sameer Trivedi, Dr Hegde Rashmi, Dr Panda Madhumita, Dr Mahadkar Namrata
IMS, BHU, Varanasi

Introduction: Silodosin is preferred in BPH with comorbidities however there is scarcity of Indian data regarding its clinical use. Hence, current survey was planned to understand the practice patterns and use of silodosin in BPH with comorbidities by Indian urologists.

Methods: A questionnaire-based survey was conducted among Indian urologists.

Results: 243 practicing urologists participated in the survey. Around 67% of doctors responded that 30% - 50% of patients have bothersome LUTS due to BPH and 52% responded that 30-50% patients have ≥ 1 comorbid condition with most common age group being 60-70 years. 49% of doctors reported >30% of their patients as having hypertension, whereas 53% responded 10% to 30% of their patients as having diabetes. According to 73% responders, up to 20% patients have coexistent IHD.

According to 74% respondents, silodosin is the preferred alpha blocker in BPH patients with above mentioned comorbidities. Silodosin was rated as the most rapidly acting 1 blocker which works within 3-4 days, and most effective in reducing BOO, nocturia and voiding symptoms.

Silodosin was rated to cause least incidence of adverse effects like dizziness, headache and blackout, and least changes in clinical parameters as compared to other alpha blockers.

94.65% urologists mentioned that switching to Silodosin yields greater relief in patients who had suboptimal response to other 1 blockers. 65% of Urologists responded that 60% α of 80% of patients are satisfied with silodosin therapy.

Conclusion: In BPH patients associated with comorbidities, silodosin is the most preferred drug among alpha blockers by Indian urologists.

MOD POS 03 – 04
Utility and outcomes of angioembolisation in urology practise: a single tertiary care center experience
Dr Rudra Prasad Ghorai, Dr R P Ghorai, Dr SC Naviya, Dr S Kumar, Dr V K Panwar, Dr A Mittal, Dr AK Mandal
AIIMS Rishikesh

Introduction: Angioembolisation is an important armament in the arsenal of minimally invasive management in urology practice. Various literature shows established role of angioembolisation in renal pathology but in other urological extrarenal pathologies like benign prostatic hyperplasia, its role has been investigated recently. We
have done a retrospective audit of angioembolisation at our center to analyse indications, complications and outcomes of angioembolisation in urology practice.

Materials and Methods: All urological patients at tertiary care teaching hospital who had angioembolization during July 2018 to June 2021 were enrolled for this retrospective study. All relevant data were reviewed and analyzed.

Results: A total of 42 patients underwent angioembolization. Indications for angioembolization included renal trauma (3), metastatic RCC (1), post PCNL hematuria (8), post PCN hematuria (3), angiomyolipoma of the kidney (4), post-pyelolithotomy (1), intractable hemorrhagic cystitis (3), spontaneous renal hemorrhage (2); ADPKD with hematuria (2), penile AVM (1), recurrent AUR with prostatomegaly (1). Embolization agents included only coils (n = 27), polyvinyl alcohol particles (n = 2), Glue (n = 7), lipoidal with coil (n = 5), and lipoidal with glue (n = 1). Clinical success was achieved in 92.85 % cases. Postembolization syndrome were seen in seven patients and were managed conservatively.

Conclusions: Angioembolisation is safe and effective, it has revolutionized the management of urological bleeding in emergency as well elective setting. Angioembolisation can be used and as an integral part of minimally invasive treatment approach in urology practice with minimal procedure related morbidity with good outcomes.

MOD POS 03 – 05
How to diagnose recurrence UPJO
Dr Moganakannan K, Dr Natarajan Kumaresan, Dr Ramesh Babu
Sri Ramchandra Institute, Chennai

Introduction and Objective: Extracorporeal shockwave lithotripsy (ESWL) is an established modality to treat renal stones less than 2 cm. With the ongoing COVID-19 pandemic and limited opportunity for elective surgery, we explored non-invasive treatment options for renal stones of size 2-3 cm. The objective of this study is to measure the efficacy, complication and need for ancillary procedures of ESWL as a management strategy in large renal stones (2-3 cm) in this crisis of the ongoing pandemic.

Methods: This study included 154 patients with renal stones of 2-3 cm who underwent ESWL with Dornier Delta III lithotripter between the period of March 2020 to May 2021. Demographic data, characterization of stones, post-procedure pain score, complications with Clavien-Dindo grading and their management, number of sessions of ESWL, and clearance, which was defined as less than 4 mm residual stone one month after completion of treatment were evaluated.

Results: The mean age of the patients was 43.5±12.1 years. Mean number, size, stone density, skin-to-stone distance, and ESWL sessions were 1.47±0.7, 2.38±0.3 cm, 773±364 Hounsfield units, 9.5±1.8 cm and 2.36±0.7, respectively. Complete clearance was achieved in 130 cases (84.4 %). Statistically significant correlation was found for stone clearance with the size of stone (p=0.0355), stone density (p<0.0001), and sessions of ESWL (p=0.0002). Only 8 patients visited emergency post-procedure and 3 required admission.

Conclusions: ESWL can be used as a safe, effective alternative strategy to surgical management in patients with stone sizes 2-3 cm with minimum complications. It can help to reduce the stone burden during the COVID pandemic.
Role of serum level of Vitamin D in predicting recurrent UTI in premenopausal women
Dr Gajendra Nagar, Dr SS Yadav
SMS Jaipur

Introduction: Vitamin D deficiency is a worldwide problem. Vitamin D deficiency is having association with many infectious disease like tuberculosis, inflammatory bowel disease and autoimmune disease. After understanding the role of serum vitamin D level this study was conducted, so that association of serum level of vitamin D to recurrent UTI can be assessed.

Aims & Objectives of study: To examine the association between recurrent UTI and serum level of vitamin D.

Material and Method: After meeting inclusion and exclusion criteria, total 200 participants, (group A) Premenopausal women with recurrent UTIs & 100 healthy matched (groupB) Volunteers, who had came to department of urology, SMS Jaipur were taken in study. Serum vitamin D level were compared between 2 groups

Results: In patients group A mean age was 36.7 +/- 6.1 years and in Group B, it was 35.2 +/- 6.4 years and no significant difference was noted in terms of age .In group A mean serum level of vitamin D was 11.5 +/- 5.3 ng/ml and in group B it was 24.5 +/- 6.2 ng/ml. There was a significant difference between two groups (p value <0.05).

Conclusion: On basis of serum level of vitamin D, it was concluded that deficiency of vitamin D is associated with recurrent UTI in premenopausal women .so we concluded that assessment of vitamin D assessment is required in these patients. Further more studies are required to establish the role of vitamin D assessment and supplementation

The first robotic day care procedure in the management of testicular vein syndrome, a rare cause of hydroureteronephrosis.
Dr Deersh Kannan, Dr Kunal Dholakia, Dr Satheesh Ramamurthy, Dr N Ragavan
Bengaluru

Testicular vein syndrome is a rare condition where the testicular vein compresses the ipsilateral ureter resulting in hydronephrosis. Presenting a case of left testicular vein syndrome that was operated as a day care procedure. This will be the ninth case in literature and the first reported case of Robotic ureteroureterostomy for testicular vein syndrome.

Hurdle and solutions for urology resident doctors during covid-19 pandemic
Dr Rajesh Kumar, Dr K Sudhakar, Dr S Vasudevan, Dr Vijay Vasantray Oza
IGGGH, Pondicherry

COVID-19 pandemic has disrupted the whole ecosystem of well-established, traditional structure of medical education not only in India but across the globe. Initiation of virtual classes in urology teaching in India was at par with developed countries but acceptance and progress have been slow. However, the recent corona virus disease-19 (COVID-19) pandemic leading to disruption of Halstedian model of teaching has changed the traditional dynamics of perception of this mode of education.

The new limitations of physical presence in wards & OT have accelerated the development of an online learning environment, comprising both of live demo of surgery and case discussion, and the introduction of novel ways of student assessment. At the same time, this prolonged crisis had serious effects on the lives of residents including their behavioral well-being and the impact on their academic trajectories & hands on experience. The new normal reality has change, on many occasions, triggered the ‘acting up’ of residents as front line healthcare staff, which has been perceived by many of them as a positive learning and contributing experience, and has led to a globalization of the educational institutions. USI has been a pioneer and introduced the smart learning on line classes into surgical education which never being possible before this pandemic.

Considering all these things, the urgency for rapid and novel adaptations to the new challenges has functioned as a springboard for remarkable innovations in medical education, including the promotion of a more ‘evidence-based’ approach.

Clinical relevance and treatment outcomes of urogynaecological fistula: experience from a tertiary centre
Dr Kushwaha SS, Dr Manikandan R, Dr Dorairajan LN, Dr Sreerag KS, Dr Kalra S
JIPMER Pondicherry

Introduction and Objective: Urogynaecological fistulas are devastating consequences, most commonly resulting from obstetric trauma in developing countries. The aim of the study is to share our experience in terms of clinical characteristics, surgical approach, outcomes and the factors affecting outcomes of urogynaecological fistula repair.
Introduction: The incidence of TB in India has decreased but still both pulmonary and extrapulmonary TB (predominantly lymph node and genitourinary) persist as a major health concern. Genitourinary TB is unique in the way that it requires surgical correction in almost half of the cases along with standard antitubercular therapy. We present management of a challenging case of 11-year-old female who was not able to hold her urine more than 30 minutes due to small capacity of bladder (30-40 ml) along with right sided ureteric stricture causing severe backpressure changes in right kidney.

Methods: On clinical evaluation patient had frequency, urgency, dysuria with suprapubic pain. Two episodes of hematuria and intermittent fever for six months.

Preoperatively her examination and blood/urine investigations were normal. IVP showed right sided ureteric stricture and left sided VUR along with thimble bladder which was confirmed on CT scan. Ileocystoplasty with right ureteric reimplant in the same ileal conduit was done.

Results: Postoperative period was uneventful. At prese

Case report: 50 year old male patient presented with intractable frequency of micturation with recurrent urinary tract infection since 2 years , he was treated as case of GUTB , and was prescribed anti kochs treatment for same but his symptoms persisted . He came for further evaluation , we had taken detailed history and physical examination . He had undergone bilateral laparoscopic inguinal hernia repair 6 years back . On Contract CT abdomen and pelvis and cystoscopic evaluation mesh erosion was found at dome of urinary bladder , which was removed and bladder repair done. Vesicocutaneous fistula developed which was managed by repeat surgery for its repair. We have revived literature and found only 18 case reported till now. High index of suspicion with prompt evaluation required for diagnosis and management and evaluation of mesh migration into urinary bladder following inguinal hernia repair

This study aim to assess all cases of UPJO with poorly functioning kidneys who underwent either pyeloplasty or nephrectomy, and compare the complications, and to assess predictive factors for improvement in DRF after pyeloplasty. It was a retrospective study. All patients with unilateral UPJO with DRF < 20 % who underwent either pyeloplasty or nephrectomy were included in the study. Out of 42 patients 27 patients underwent pyeloplasty (group A), 15 of them underwent nephrectomy (group B). 42 cases were included in the study. Mean age in
group A was 34yrs (6-42), group B 36 yrs (8-48). Mean preoperative DRF was 11% (0-20%). Mean preoperative
DRF in group A was 14% (12-20%), group B 6% (0-9%). There was no significant difference in preoperative
variables in 2 groups except in mean DRF (6% vs 16%). In surgical variables laparoscopic approach was more
significantly common in nephrectomy cases. Although the length of hospital stay in nephrectomy group was
shorter but there was no significant difference. Postoperative renogram were available for 24 patients. Out of 24
cases 8 cases experienced improvement in DRF more than 5%, 9 cases unchanged and 7 cases fall in renal function. Comparing all the parameters between patients who had >5% DRF improvement and others, symptomatic presentation and normal renal function test before surgery were related to better recovery. Patient with UPJO with borderline DRF, the decision to do a pyeloplasty should be based on symptomatic presentation and normal renal function test before surgery

MOD POS 04 – 05
Role of ileal ureter replacement in modern urology
Dr Pradeep Nayak, Dr S Trivedi, Dr Yashasvi Singh
BHU Varanasi

Introduction: The use of ileal segments for ureteral substitution has become a valuable procedure in
reconstructive urology. Although it was initially described for tubercular obstruction, recent decades have seen
the indications for its use broaden. We report a contemporary series representing changes in indications, patient
selection and clinical outcomes.

Materials and methods: Between March 2015 and April 2021 total 10 patients underwent ileal ureter replacement.

Medical records were reviewed to include data on patient demographics, disease etiology, operative details,
preoperative and postoperative complications ased by modified clavien scale, length of stay and follow up.

Results: Mean age of patients were 40.1±5.7 , indications for ileal ureter was genito urinary tuberculosis in 6
patients, post ureteroscopic lithotripsy ureteric avulsion in 2 patients, post abdominal trauma with 13cm ureteral
defect in 1 patient and post abdominal hysterectomy for perforated uterus with12cm ureteral defect in 1 patient. 3
patients developed wound infection (clavien 2), 1 patient developed anastamotic leak (clavien 3a), and one
patient developed post-operative ileus (clavien 2). Serum creatinine decreased in 4 patients and remained stable
in 4 patients. 3 patients underwent anastomosis by anti- reflux method , out of which one patient developed
pyelonephritis , 7 patients underwent anastomosis by reflux method out of which one developed pyelonephritis.

Conclusion: Ureteral replacement with bowel segment is a challenging but useful procedure for long segment
ureteral strictures. The main advantage of reconstructing the ureter with ileum is long term avoidance of
nephrostomy tubes, ureteral stents and nephrectomy.

MOD POS 04 – 06
A retrospective analysis of male erectile dysfunction following different types of urethroplasties
Dr Singh Harpreet, Dr Agarwal Neeraj, Dr Priyadarshi Shivam
SMS Medical college, Jaipur

Introduction: Urethroplasty is considered the standard of care for urethral stricture disease. As with any other
genital surgery, there is a possibility of injury to cavernous nerves or pudendal artery or a chance of penile
shortening, which can affect postoperative sexual function. The aim of this study was to assess the influence of
urethroplasty on erectile function.

Material and Method: A retrospective analysis was done in 50 patients who underwent urethroplasty from
January 2019 to December 2020 with normal pre operative erectile function. Patients were categorized according
to stricture location, stricture length and surgical techniques. Erectile function of patient was
assessed preoperatively and post-operatively at 3 months, 6months and 1 year with the International Index of Erectile Function
(IIEF) questionnaire.

Results: Mean age was 49 (range 16-58) years. Of the patients with anterior stricture (n=45), augmentation
urethroplasty was performed in 24 patients and end to end anastomotic urethroplasty in 21 patients. Mean IIEF
score was 23.6±3.5 preoperatively, 20.10±4.2 at 3 month (p<0.001), 22.7±2.3 at 6 month (p=0.37) and
23.7±1.7 at 12 month (p=0.03). All 5 patients with pelvic fracture urethral injury underwent progressive perineal
urethroplasty. Mean IIEF score was 22.1±4.3 preoperatively, 18.8±5.4 at 3 month (p=0.002), 20.9±3.5 at 6
month (p=0.37) and 22.0±1.5 at 12 month (p=0.427).

Conclusion: Urethroplasty does not significantly affect erectile function regardless of the type of surgery, site and
length of stricture. Men should be counselled about the possibility of transient ED after procedure.

MOD POS 04 – 07
Novel 3-point fixation technique of buccal mucosal graft urethroplasty: Interim results of this pilot study.
Dr Brij Mohan, Dr Amit Bansal, Dr Ruchir Maheshwari, Dr Samit Chaturvedi, Dr Rohit Kaushal, Dr Anant Kumar
Max Super Speciality Hospital, Saket, New Delhi

Introduction and Objectives: We studied the impact of novel method of suturing buccal mucosal graft, on
anastomotic site stricture recurrence.
Methods: In this prospective study, patients with long-bulbar urethral stricture, with/ without failed prior surgical corrections, were included (July-2020 till-date). Variables included patient's age, comorbidities, addictions, prior surgeries, length of stricture, Patient reported outcomes measure (PROM) score and maximum-urinary flowrate (Qmax: pre-operatively, post-operatively 3 and 6 months, 1 and 2 years), complications. Stricture recurrence defined as deterioration of urinary flow rate by ≥10 ml/sec. We hypothesize, that making the ends of elliptical urethrotomy, more rounded or wide, should allow the graft to sit more comfortably, minimize ischemia, and improve the anastomotic stricture rates.

Paired continuous data analyzed using Wilcoxon-signed-rank test and unpaired data analyzed using Mann-Whitney-U test. Categorical data was analyzed using Chi-square test/ Fisher-exact test. P value < 0.05 considered significant.

Results: All patients had sterile pre-operative urine culture and none of them had any perioperative complications. All the patients have had significant improvement in Qmax and PROM score, which has sustained over 6 months of follow-up.

Conclusions: These interim results look promising and further follow up and analysis at 2 years should further help us test our hypothesis and plan a larger case-controlled study.

MOD POS 04 – 08
Retrospective audit of urethroplasty techniques for urethral stricture disease management at a tertiary care center in Uttarakhand
Dr R P Ghorai, Dr S Kumar, Dr SC Naviya, Dr SK Ranjan, Dr A Upadhyay, Dr AK Mandal
AIIMS, Rishikesh.

Background: Urethral stricture disease is a common problem faced by reconstructive urologist. Urethral stricture disease is having a propensity for recurrence following endoscopic management. Treatment strategies depend on stricture location, length, and complexity. We herein describe our early experience of urethroplasty techniques, treatment course and outcomes in managing urethral stricture disease at a tertiary center in Uttarakahnd.

Methods: Retrospective data of patients with urethral stricture disease admitted in AIIMS Rishikesh between June 2018 to May 2021 were collected and analysed for this study.

Results: Total 58 cases of urethral stricture disease patients were treated. Regarding etiology idiopathic cause in 17, straddle injury in 8, hypospadias 6, instrumentation in 3, traumatic catheterisation in 6 and lichen sclerosus in 8, trauma in 10 patients. Most common site was anterior urethra (27), BMJ stricture in 7 cases, pan anterior stricture 11, PFUDD in 8. Mean average stricture length was 5.68 cm. Buccal mucosa was used in 14 cases, EEU in 11 patients, PPU in 10 patients, TIP in 6 cases, staged urethroplasty in 14 cases, 1 Jordan flap urethroplasty, 1 saphenous vein graft urethroplasty, 1 preputial graft urethroplasty. Success rate for EEU was 80%; 75% for staged urethroplasty and 60% for augmented urethroplasty.

Conclusion: Our results with staged urethroplasty and anastomotic urethroplasty are comparable with international studies. Buccal mucosal graft urethroplasty for long segment stricture provides better results. Pre-operative counselling regarding recurrence risk and post-operative follow up should be explained to patients prior to surgery to optimise patient’s satisfaction.

MOD POS 04 – 09
Case report on pelvic floor urethral distraction defect with a successful outcome
Dr Shalilesh Raina, Dr Hussain Shaikh, Dr Abhishek Ghosh, Dr Amit Polara
Jaslok Hospital and Research Centre, Mumbai

Introduction: PFUDD is a challenging urologic problem that may result in complications such as urinary incontinence and inability to void. As compared to the male urethra, female urethral anatomy is less complex. Injury of the female urethra is rarer.

Case Report: 39 year old female presented in casualty 6 months back with a history of RTA with pelvic fracture, voiding difficulty and blood per meatus. A single attempt of gentle catheterization was done but unsuccessful. RGU showed complete disruption of urethra from the bladder neck, defect <2 cm. SPC was done. Pelvic fixation was done and patient was discharged.

Management: After 6 months, Cystography was done through SPC. No passage of iodinated contrast agent distal to the bladder neck was seen. On cystoscopy urethrovaginal fistula was seen. Anastomotic urethroplasty with inferior pubectomy plus repair of urethrovaginal fistula with positioning of martius fat pad done. After a month, SPC removed and patient voided successfully with mild (frequency, urgency) which was dealt with anticholinergics and kegel exercises and on a regular follow up, patient was found to be continent with no LUTS.

Discussion: There is a controversy in the timing of surgery (delayed versus immediate) in the management of PFUDD. Bleeding, fracture instability, and friability of the edematous tissue are the major concerns during early repair. Continence after anastomotic urethroplasty for PFUDD is maintained by bladder neck and incontinence occurs only when the bladder neck function is impaired.

MOD POS 04 – 10
Role of tadalafil in improving success of anterior urethroplasty
Dr Sharma Vinip, Dr Bafna Sandeep, Dr Joshi Pankaj, Dr Bhadranavar Shreyas, Dr Kulkarni Sanjay
Pune

Introduction: Success rate of primary anterior urethroplasty is around 85 to 90 %, causes of recurrence are fibrosis and ischemia. Tadalafil 20 mg is used for medical management of erectile dysfunction. It has vasculogenic and antifibrotic property. We wish to evaluate these properties of Tadalafil (low dose -5 mg) in management of anterior urethral stricture.

Objective: To define the role of low dose Tadalafil (5 mg) in anterior urethroplasty outcome.

Material and methods: - This is a prospective nonrandomized study, conducted from January 2017 to May 2021.

Patients were divided in two groups. In group 1 patients had severe fibrotic urethra (less bleeding in surgery), while other patients kept in group 2. Group 1 received Tadalafil 5 mg from Postoperative day 1 and continued for 6 months and Group 2 did not receive.

Result: 916 patients enrolled in study; 87 patients received tadalafil while 829 Patients did not. All patients were followed up with uroflow at 3, 6, 12 months then yearly, average follow up of patient was 17.1 months. Success is defined in terms of free of symptoms, acceptable uroflow rate and no need of intervention. Success rate in group 1 is 95.40 % while in group 2 is 85.8 %. Nonrandomization and Unequal size in both groups are shortcomings of study.

Conclusion: Tadalafil can be considered in management of anterior urethral stricture to increase the surgical outcomes. We already published our similar study in PFUI management.

MOD POS 04 – 11
Traumatic Bulbar Urethral stricture- modified end to end urethroplasty -results and outcome.
Dr Ramnaresh Daga, Dr Mukesh C Arya, Dr Jaiprakash Swami, Dr Ankur Singhal, Dr Ajay Gandhi
SNMC Bikaner

Introduction: End to end urethroplasty in traumatic bulbar stricture is successful in 90-95% of cases but quality of life is affected by post-void dribble and ejaculatory dysfunction (EjD) in follow-up. Here, we present modified urethroplasty to overcome these problems.

Material and Methodology: A retrospective analysis (from January 2015- January 2020) of 65 patients with traumatic bulbar stricture managed by standard urethroplasty (Group 1, N=35) and modified urethroplasty (Group2, N=30) was done. The comparison also included their post-operative EjD and post-void dribble.

Results: Mean age of patients was 33.65 (15-55) years. Mean length of stricture was 1.42 (1-2) cm. Mean Qmax was 27.8 and 26.4ml/s in the modified and standard urethroplasty group (P-value>0.05). EjD was calculated for each patient using questions from male sexual health questionnaire (MSHQ) and MSHQ mean scores pertaining to ejaculation had a significant difference between Group1 and Group2 with mean post-operative scores of 17.17 and 24.93 respectively (p-value<0.005) At 1-year, ten patients (33%) from Group 1 while 4% (N=1) patients in the Group 2 showed post-void dribbling respectively (P-value-0.007).

Discussion: Success rate (patient not needing post-operative intervention) was 100% in modified and 97.14% in standard urethroplasty group. Results in terms of EjD and post-void dribble were statistically significant.

Conclusion: In traumatic bulbar stricture, muscle and nerve-sparing urethroplasty is associated with statistically significant better outcomes in terms of EjD and post-void dribble.

MOD POS 04 – 12
Bilateral Synchronous 3-port transperitoneal Laparoscopic Ureterolithotomy
Dr Bharath Kumar N
Department of Urology, Command Hospital, Pune

MOD POS 05 - 01
Modified technique in right laparoscopic donor nephrectomy
Vinay Kumar Raj, Dr P Garg, Dr R Maheshwari, Dr S Chaturvedi, Dr A Kumar, Dr R Kumar
Max Superspeciality Hospital, Saket, New delhi

Introduction: Laparoscopic donor nephrectomy has become standard of care for graft retrieval. Laparoscopic harvesting of the right kidney is technically more challenging than that of the left kidney because of the short right renal vein. We present here technical modification in right LDN for better outcomes.

Materials And Methods: In standard LDN ureter is cut before clipping of renal vessels. It was observed in one case, when the ureter was divided before clipping the renal vessels it caused rotation of kidney and twisting of pedicle which in turn lead to technical difficulty, increased operative time, increased warm ischemia time and lots of anxiety to operating team. In modified right lap donor nephrectomy standard steps are applied but the ureter is divided after clipping of renal vessels.
Assessment of living donors in terms of functional outcome and quality of life using psychometric analysis
Kumar A, Dr Upadhyay R, Dr Ahmad A, Dr Mahmood K, Dr Krishna A, Dr K Rajesh
IGIMS, Patna

Introduction And Objective

Introduction: Renal transplantation is the treatment of choice in patients with chronic renal insufficiency for better quality of life and extended life expectancy. The use of living-donor kidney allografts with multiple vessels continues to rise in order to increase the donor pool with evolving surgical techniques. Anastomosing kidneys with multiple renal arteries are always considered a surgical challenge requiring technical skill and expertise with varied outcomes reported in literature. We aimed to evaluate and compare long-term outcomes and complications in kidney transplant recipients from single renal artery (SRA) allografts harvested via live donor nephrectomy with multiple renal arteries (MRA).

Materials & Methods: We retrospectively reviewed both donor and recipient records of all living donor transplants between January 2010 and January 2020. Characteristics examined included donor demographics, intraoperative parameters and complications, recipient post-operative complications, short- and long-term recipient allograft function of both SRA and MRA graft recipients. Results were compared and analyzed.

Results: Of 330 patients, 286 grafts had SRA and 44 MRA. Delayed graft function was 5.3% for single, 5.6% for ≥ 2 renal arteries. Mean recipient creatinine at 1 week and one month was 1.9 and 1.6, 2.1 and 1.7 and 2.2 and 1.7 respectively. At one year, average creatinine was 1.6 with no significant difference between groups.

Conclusion: MRA grafts were associated with comparable long-term outcomes for graft and patient survival when compared to SRA grafts. MRA allograft recipients experience longer ischemia times, although clinically insignificant.

Renal graft arterial anastomosis to the External iliac artery is superior to Internal iliac artery? Is the jury still out?
Partho Mukherjee, Dr. Arman Chacko, Dr. Sudhindhra J., Dr. Arun George, Dr. Rajiv Mukha,
Santosh Kumar
CMC, Vellore

Introduction & Objectives: The status of the anastomosis of the renal graft artery to the external iliac artery (EIA) compared to the internal iliac artery (IIA) is yet to be defined. We analyzed our outcomes in two retrospective cohorts in terms of the graft function outcomes.

Materials & Methods: This was a retrospective cohort analysis of patients who underwent renal transplantation from January 2013 till December 2017. Recipients from a live-related living donor, with a single donor renal artery, with a minimum follow-up of 6 months were included. The patients were followed up in two groups where the donor kidney's renal artery was anastomosed into either the IIA (Group A) or the EIA (Group B). The recipient characteristics, intra-operative events, post-operative events, post-transplant color Doppler studies done on the five post-operative, and the last available follow-up days were recorded. The two arms were compared for surgical and vascular outcomes.

Results: Group A had 153, and Group B had 192 patients. The mean of the renal arterial velocities in group B was higher than those in group A (192 cm/sec vs. 135 cm/sec, p=0.0001). The peak systolic velocity ratios of the transplant renal artery and the parent artery were also in the higher normal range for group B (P = 0.021). There was no difference in graft function at the last follow-up.

Conclusions: There was no significant difference between EIA and IIA anastomosis. There was no clinically significant difference in overall graft outcome between the two groups.

Assessment of renal mass in donors, periodic evaluation is required to detect at the earliest any complication that can affect the solitary kidney. Donor may not receive adequate medical care after donation. Inadequate care may because of inadequate counseling prior to donation, lack of access to heath
Renal artery kink - a jinx in the transplant and lessons learn

Vignesh M, Venetesh KS, Madhava B, Goutham S, Sampath Kumar KP, Rajani S
GKNM hospital, Coimbatore

Introduction: We are reporting an interesting case of renal artery kink causing early graft dysfunction, the associated diagnostic dilemmas and its management.

Case Report: 38 year old female, a case of ESRD secondary to chronic interstitial nephritis underwent deceased donor (Right Kidney) renal transplantation. The double renal arteries with the aortic patch was anastomosed with the right external iliac artery and single renal vein with IVC patch was anastomosed with the external iliac vein. Patient had low urine output in the immediate postop period. Bed side graft Doppler showed low velocity monophasic flow in the intra renal arteries of the upper pole with no detectable venous flow. There was good arterial and venous flow in the lower pole of the kidney. On re-exploration, the graft kidney looked well perfused and intraop Doppler showed preserved but dampened flow in the upper pole. Since, no obvious surgical cause was found, possibility of atherosclerosis of intra renal arteries of the upper pole was considered and patient was shifted back to ICU. With a persisting low urine output, CT angiography was done which showed a kinked renal artery supplying the upper pole. Patient was re-explored again and the upper polar branch was anastomosed separately to the external iliac artery.

Conclusion: Transplant renal artery kink should be suspected when there is parvus-tardus waveform in the Doppler even when there is enough parenchymal flow. CT angiography confirms the kink and prompt management in the form of endovascular stenting or surgical exploration should be done.

An Unusual Case of Colovesical Fistula in Renal Allograft Recipient

N Supradeep, Dr. S. Patwardhan, Dr. B. Patil, Dr. S Bhujbal
KEM, Mumbai

Introduction: A colovesical fistula is an abnormal communication between the large bowel and urinary bladder. It is a rare condition and usually occurs secondary to diverticular disease, malignancy, and inflammatory bowel disease.

Case Presentation: A 42-year-old female with complaints of pneumaturia, passing foul-smelling muddy urine, and burning micturition for the past 10 days. She received renal transplantation in the year 2002. She was initially misdiagnosed to have emphysematous pyelonephritis of grafted kidney on CT scan and was managed conservatively with iv antibiotics. When her symptoms failed to settle she underwent colonoscopy and CT scan with per-rectal contrast which revealed a fistulous communication between sigmoid colon and dome of bladder. She underwent explorative laparotomy and excision of the fistulous tract with primary repair of bowel and bladder. The patient recovered well and was discharged on the fourteenth postoperative day. Histopathological examination (HPE) of fistulous tract revealed florid giant cell granulation around vegetative matter and crystalline material that resembled suture material. HPE showed no evidence of Tuberculosis.

Conclusion: To our knowledge, this is the first case of colovesical fistula in a renal allograft recipient which occurred 20 years after surgery. The presence of gas in the bladder in the absence of recent history of instrumentation of urinary tract should prompt us to evaluate for colovesical fistula. Pneumaturia, fecaluria, and recurrent UTI are telltale features of colovesical fistula, and when patients of renal allograft recipient present with them should prompt a proper workup and swift surgical management as the outcome is uniformly favorable.
Surgical Management of Vesicoureteric Reflux in a tertiary care center.
Prasad Brahme, Hemant Pathak, Mukund Andankar, Sandesh Parab, Neel Patel
TNMC & BYL Nair Hospital, Mumbai

Vesicoureteral reflux (VUR) is the most common uropathy affecting children. Compared to children without VUR, those with VUR have a higher rate of pyelonephritis and renal scarring following urinary tract infection (UTI). Options for treatment include observation with or without antibiotic prophylaxis and surgical repair. Surgical intervention may be necessary in patients with persistent reflux, renal scarring, and recurrent or breakthrough febrile UTI. Both open and endoscopic approaches to reflux correction are successful and reduce the occurrence of febrile UTI. Estimated success rates of open and endoscopic reflux correction are 98.1% (95% CI 95.1, 99.1) and 83.0% (95% CI 69.1, 91.4), respectively. Factors that affect the success of endoscopic injection include pre-operative reflux grade and presence of functional or anatomic bladder abnormalities including voiding dysfunction and duplicated collecting systems. We retrospectively reviewed our experience over 10 years of patients with primary VUR who underwent surgical management and had at least one year of follow-up at our center from 2010 to 2020.