RENAL TUMORS IN YOUNG ADULTS: A SINGLE CENTRE EXPERIENCE FROM A DEVELOPING COUNTRY

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Objective: To determine the pattern and the outcome of renal tumors in young adults in Pakistan.

Methods: We retrospectively analyzed 133 young adults (age: ≥ 16 to ≤ 40 years) with 136 renal tumors who underwent surgical treatment for suspected renal cancer from 1994 till July 2010. The clinical and pathological parameters were determined and their impact on final outcome was analyzed.

Result: The mean age of all patients was 33.3±6.2 years. 121 (88.9%) renal tumors were malignant, while 15 (11%) were benign. 76 (62.7%) patients had stage I/II tumors, 22 (18.1%) stage III and 23 (19%) stage IV disease at surgery. The overall cancer specific survival rates for 94 patients with malignant tumors at 1, 5 and 10 years were 97%, 83% and 83%, whereas the cancer free survival (CFS) rates were 80%, 63% and 37%, respectively. Patients with age ≤35 years had 1 and 5 year CFS rates of 83% and 71%, respectively, as compared with 76% and 49%, for patients >35 years [p=0.02]. Regarding tumor size, 1 and 5 year CFS rates for tumors ≤10 cm were 93% and 75%, while tumors >10 cm showed CFS rates of 56% and 41%, respectively [p=0.0001]. For stage I tumors, CFS rates at 1 and 5 years were 98% and 84%, for stage II, 82% and 63%, for stage III, 62% and 50%, respectively. One-year survival for stage IV was 48% only (p=0.0001).

Conclusion: A wide heterogeneity of renal tumors is documented in young adults with delayed presentation in our population.

URDU TRANSLATION AND VALIDATION OF THE FIVE ITEM INTERNATIONAL INDEX OF ERECTILE FUNCTION (IIEF-5)

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Objective: The objective of our study is to evaluate the validity of an Urdu translation of the International Index of Erectile Function (IIEF-5), so that this instrument can be used for diagnosis of erectile dysfunction, assessment of the response to pharmacotherapy, and also for research into discipline.

Methods: All consenting adult men with unhindered access to a sexual partner, reporting to our outpatient departments at four hospitals of Lahore, who also had good capability to read and understand both Urdu and English
languages, were administered the questionnaire, initially in Urdu and then English. A total of 47 men were included over a period of one month. The responses to these questionnaires were tabulated, and test statistics was applied.

Result: Of the total of 47 men, the responses in Urdu and English for severe, moderate, mild to moderate, mild and no ED for Urdu and English versions were 4.3 % vs. 8.5, 8.5 % vs. 10.6, 31.9 % vs. 27.7 %, 34 % vs. 31.9 %, 21.3 % vs. 21.3 % respectively. Descriptive statistics of the score obtained from questionnaire in Urdu vs. English for question number 1 through 5 were, 3.23 ± 1.289 vs. 3.26 ± 1.310, 3.53 ± 1.080 vs. 3.40 ± 1.116, 3.34 ± 1.166 vs. 3.32 ± 1.181, 3.53 ± 1.158 vs. 3.15 ± 1.302, 3.26 ± 1.206 vs. 3.09 ± 1.349. Comparison of Means of scores of the items obtained through questionnaires for question 1 through 5, by t-test showed that all the p-values were greater than 0.05, indicating insignificant difference between the means of scores of ordinal responses to the five items, obtained through questionnaire in Urdu and English language. Value of Kappa statistics was 0.714 (71.4%) which indicates a substantial agreement between the questionnaire of English and Urdu Languages in measuring the severity of ED, according to the guidelines provided by Landis and Koch (1977). The value for Cronbach’s Alpha was 0.882 (88.2%) (Which must be greater than 0.70). The value of F-test for both single measure and Average measure were same (8.458) with the p-value < 0.0001.

Conclusion: Our Urdu translation of IIEF-5 highly correlated with the original version in English and can be used for evaluation when required.

ROLE OF SELECTIVE SEROTONIN REUPTAKE INHIBITOR SSRRIS IN PREMATURE EJACULATION
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Objective: To determine the efficacy of SSRRIs in delaying the ejaculation, in patients with premature ejaculation in our patients and breach in marital relationship.

Methods: It is a comparative Randomized control trial, conducted in the department of Urology, Institute of Kidney Diseases, Hayatabad Medical Complex Peshawar from Jan 2007 till Dec 2010. Total of 300 patients with pure ejaculatory dysfunction in form of premature ejaculation were included in the study. The sample was randomized by the last digit of hospital (PIN) No in two equal groups. Group ‘A’ that comprised of 150 patients were administered SSRRIs in form of (Fluoxetine OR Paroxetine) for 3 months. The group ‘B’ comprising of 150 patients was given placebo in form of multivitamins and Zinc supplements, Vitamin C for 3 months respectively. The mean delay in the ejaculation along with other variables was assessed on structured Performa and was analyzed on SPSS.

Result: The median age of the patient was 26.5 years with the range of 15-68 years. 12 patients in the group ‘A’ and 16 patients in group ‘B’ lost to the follow up after 28 days in surveillance and were excluded from the study. The delay in the ejaculation time was observed in 121 patients out of 138 patients (88.4%) while in Group ‘A’ while it was recorded in 84 out of 134 patients (62%) in Group ‘B’ with statistically significant P value of <0.001.

The mean delay in the ejaculation was 3.4 minutes in Group A vs. 1.2 minutes in Group ‘B’ (p value= 0.001). Minor complication of drowsiness was observed in 12 patients in group A that used SSRRIs and 3 patients had developed dyspepsia after the use of placebo on Group ‘B’. However no major complications were recorded in both the groups.

Conclusion: SSRRIs are highly effective and safe in the management of patients with premature ejaculation.

HYPOGONADOTROPIC HYPOGONADISM “ CHANGES IN TESTICULAR BLOOD FLOW AND APPEARANCE AFTER TREATMENT WITH GONADOTROPHINS.
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Objective: Hypogonadotrophic Hypogonadism (HH) is a genetically heterogeneous developmental disorder. It often presents as absent spontaneous puberty, low luteinizing hormone (LH), follicular stimulating hormone (FSH) and testosterone levels. This disorder responds well to treatment with gonadotrophins. Our study aims to investigate the testicular changes that lead to this improvement in testicular function.

Method: All male patients presenting our clinics, with the disease, were included in the study. Patients’ baseline hormonal status was recorded and followed every month. A baseline scrotal color Doppler ultrasound (CDUS) was performed before initiation of treatment and repeated 2-3 months after the treatment. The pre and post treatment findings were compared.

Results: Our study involved 28 patients, of which 16 patients had their post-treatment tests completed. Patients’ age ranges were 18-35 years. 14 patients had primary HH and 2 patients had secondary HH. Patients’ follow-up period ranged from 5 months to 3 years. After treatment, patients secondary sexual characters improved in 15/16 patients and spermatogenesis developed in 7/16 patients. There was significant improvement in testicular size. The blood flow parameters of the intra-parenchymal and sub-capsular arteries of the testes, which were almost undetectable before treatment, returned to near normal levels after treatment. Also significant increase was observed in the transverse epididymal diameters after treatment. In 3 patients varicocele was also detected after treatment, which was absent on earlier pre-treatment Doppler studies.

Conclusion: In our study we have found that HH patients have smaller testicular size, smaller epididymal diameters and mostly undetectable testicular blood flow pattern. After treatment their testicular size, testicular blood flow and transverse epididymal diameters increase significantly.

SAFETY AND EFFICACY OF ULTRASOUND GUIDED PERCUTANEOUS NEPHROLITHOTOMY (PCNL): OUR INITIAL EXPERIENCE
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Objective: To evaluate the safety and efficacy of ultrasound guided Percutaneous Nephrolithotomy for the treatment of renal stones. The use of fluoroscopy to enter pelvicaliceal system of the kidney and dilatation of the tract during percutaneous nephrolithotomy (PCNL) exposes patients and physicians to the hazards of x-ray irradiation. Therefore, the use of safe and less expensive modality like ultrasonography could be a substitution method.

Methods: Twenty-one patients underwent ultrasound guided PCNL from July 2009 to January 2011. After cystoscopy and placing a ureteric catheter, patient was placed in prone position. The location of the target calyx, puncture and dilation of the tract was performed under ultrasound guidance. Stones were broken with Swiss Pneumatic Lithoclast and residual fragments (5mm) were identified and followed by ultrasonography.

Result: Approach to the pelvicaliceal system was successfully made in all cases (100%). The average procedure time was 88 minutes (range 65–140 minutes). The mean hospital stay was 3 days (range of 2 to 5 days) and nephrostomy tube was kept for 1 day (range 1-3 days). The mean size of the stone was 3.1 cm (range 2.5 to 3.8 cm). Complete clearance was achieved in 17 patients (81%). With dual therapy (PCNL + ESWL), stone clearance was achieved in 20 patients (95.2%). No complication was encountered during the study except one patient who suffered intractable bleeding which was transfused two pints of blood. None of the patients suffered any visceral injury.

Conclusion: Even with our limited experience, it seems that the efficacy ultrasonography is comparable to fluoroscopy with additional advantage of avoiding the hazards of radiations.
IS UPPER POLE ACCESS FOR PCNL SAFE AND EFFECTIVE?
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Objective: Introduction: Upper pole access for renal stone is usually avoided by many urologist because of fear of complications, although it provides much better access to most of the intra-renal system and can be used for the management of PUJO and proximal ureteral Stricture.AIM: To assess the safety and efficacy of upper pole access in PCNL for renal stones.

Methods: Retrospective analysis of 45 PCNL procedures in our unit b/w Nov 2008 to July 2009 in which access was through upper pole puncture. There were 23 children and 22 adults. Ages ranged from 2 to 65 years. Mean stone size was 3.1 cm (range 1.5 -6 cm). There were 20 (47.6%) single stones, 18 (42.8%) multiple and 7 (16.6%) staghorn stones.

Result: Complete stone clearance was achieved in 36 (86%) patients and after 1 session of ESWL in 100%. 3 patients required URS to clear the ureter. Postoperative fever was seen in 4 (9%) patients, 6 patients (14%) developed delayed leakage (>2 days) and 1 patient (2%) had perinephric haematoma requiring needle aspiration. There was no hemo- or pneumothorax.

Conclusion: Upper pole access for PCNL is safe and effective. It can be safely employed in all age groups with minimal morbidity and good results.

PREVALENCE OF LOWER URINARY TRACT SYMPTOMS IN ELDERLY MEN AND WOMEN
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Objective: 1. To determine the prevalence of lower urinary tract symptoms in aging men and women 2.To give awareness to community (elderly men and women) regarding significant lower urinary tract symptoms (leading to silent renal failure or secondary vesical calculus or other complications), that they should visit to hospitals for lower urinary tract symptoms, where they should be properly evaluated and treated.

Method: This was cross-sectional descriptive study carried in the street to street and door to door of Lahore and Hyderabad within the duration of six months from Jan 2010 to June 2010 with the sampling technique of purposive non probability. The men and women of age more than 45 yrs were included in study after taking written informed consent. Elderly people who were diagnosed cases of BPH, neurogenic bladder, urethral stricture, urinary tract infection, vesical calculus, meatal stenosis and urothelial or prostatic malignancy were excluded from study. Those subjects who were on drugs which can modify storage and voiding urinary function like A-Blockers, anticholinergics or diuretics were excluded from study. Elderly women with diagnosed cases of uterovaginal prolapse were not included in study. History was taken and performa was filled after interviewing all the subjects. Results were made by applying SPSS version.

Results: 200 elderly men and 200 elderly women were included on study. Elderly men: Frequency of micturition was found in 15 subjects (7.5%). Nocturia 67 subjects (33.5%), dysuria 43 subjects (21.5%), urgency 15subjects (7.5%), straining 27 (13.5%), poor stream 15 (7.5%), intermittency 10 (5%), sense of incomplete voiding 30 (15%), post void dribbling 34 (17%), urge incontinence 3(1.5%), stress incontinence 2 (1%), hematuria 7 (3.5%), pelvic pain 17 (8.5%).Elderly women: Frequency of micturition was found in 31 subjects (15.5%), nocturia 36(18%), dysuria 29 (14.5%), urgency 40 (20%), straining for micturition 17 (8.5%), poor stream ( subjects were unknown of poor stream), intermittency 5 subjects (2.5%), sense of incomplete void 9 (4.5%), post void dribbling 8 (4%), stress incontinence 32 (16%), stress with urge incontinence 13(6.5%), hematuria 5 (2.5%), pelvic pain 10 (5%).
Conclusion: Significant lower urinary tract symptoms have been found in elderly men and elderly women of our community. People consider them as an aging process and do not visit Hospitals to consult with urologist.

ROLE OF INTERNAL OPTICAL URETHROTOMY IN ANTERIOR URETHRAL STRICTURE: A SINGLE CENTER EXPERIENCE
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Objective: Urethral stricture disease is an ancient disease known to the history of mankind. The occurrence of urethral stricture can be cited in ancient Greek writings. Urethral strictures can present from an asymptomatic presentation to severe discomfort secondary to urinary retention. The recent treatment modalities vary from minimal invasive techniques like urethral dilatation and internal optical urethrotomy to reconstructive buccal and bladder mucosal graft urethroplasty. Objective: To study the etiology, clinical presentation, successful out come and complications of internal optical urethrotomy in anterior urethral stricture disease.

Method: It is a descriptive study that was conducted in the department of Urology (Team C) at Institute of Kidney Diseases Hayatabad Medical Complex Peshawar from 1st Jan 2008 till 31st December 2010. Total numbers of 220 patients were collected by non-probability convenient sampling. We included only the patients with anterior urethral stricture irrespective of etiology. We excluded patients who were treated with modalities other than optical urethrotomy like urethroplasty. The data was collected on Performa and was analyzed on SPSS version 17.

Results: The mean age of the patients was 33.2 years. 149 (68%) patients develop urethral stricture due to external trauma, 62 patients developed stricture due to iatrogenic urethral injuries while 9 patients had infective stricture urethra. 138 patients presented with urinary retention and was first treated with supra pubic catheterization, 44 patients presented with symptoms of bladder outflow obstruction, 22 patients with azotemia, 13 with urosepsis wile 3 with urethrocatheteraneous fistula. Internal optical urethrotomy was attempted in all the case. It was successful in198 patients while failure was recorded in 22 cases. Early complications were recorded in 47 patients (20.2%) that included extravasations in 10 patients, Minor bleeding in 21 patients and febrile urinary tract infection in 16 patients. Regarding the late complications, the mean follow up of 10 months showed the recurrence of stricture in 66 patients (30.4%), impotence in 5 patients (2%) while there has been no case of urinary incontinence recorded in the data.

Conclusion: Internal optical urethrotomy is safe and reasonable effective modality in patients suffering from anterior urethral stricture. It is minimally invasive and can be repeated in recurrent urethral stricture and bears minimum morbidity.

ROLE OF CLEAN INTERMITTENT SELF CATHETERIZATION (CISC) IN THE PREVENTION OF RECURRENT URETHRAL STRICTURES AFTER INTERNAL OPTICAL URETHROTOMY (IOU)
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Objective: Internal optical urethrotomy (IOU) has greatly improved the treatment of urethral strictures, but there is a considerable risk of recurrence up to 50%. To prevent this, the concept of clean intermittent self-catheterization (CISC) was introduced by Lapides in the early 1970s who proposed that strict aseptic techniques are not necessary for CISC. Objectives: To determine the role of CISC in the prevention of recurrent urethral strictures after IOU and to study any postoperative complications and its tolerability for the patients.
Method: A randomized controlled study conducted from May 2007 to January 2010. Total 60 male patients with mean age 48 years (range 20-73) were selected and were randomly divided into Treatment Group (30 patients) and Control Group (30 Patients). Eight drop out occurred in the treatment group and four in the controlled group. After IOU, indwelling catheter was kept for 7 days, followed by (treatment group) CISC with Classic Nelaton Catheter (no. 16 or 18) twice a day (1 week), then once a day (4 weeks) and then once weekly (1 year). All patients were followed up at 2 months intervals for one year.

Results: Total 48 patients completed the study, 22 in the treatment group and 26 in the control group. Within the first year 4 patients (18%) in the treatment group developed urethral stricture in the control group, 12 patients (46%) developed urethral stricture

Conclusion: CISC reduces stricture recurrence after IOU, associated with less morbidity and is cost effective.

BUCCAL MUCOSAL GRAFT URETHROPLASTY FOR COMPLEX URETHRAL STRICTURE
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Objective: Outcome of buccal mucosal graft urethroplasty for complex urethral stricture, factors affecting outcome and complication

Method: Study design → Retrospective chart review, from 2002 to 2010. File of 20 patients reviewed, two were excluded due to short follow up, and data was collected on printed Performa. Data was analyzed on SPSS version 16 by using paired t test and chi square test. P-value of <0.5 was considered significant with confidence interval of 95%.

Results: Mean age of our patients is 33 years (SD + 14), 5 patients (28%) had Hypospadias, 28% had iatrogenic urethral stricture, 22% had idiopathic, 11% had BXO, and 11% had pelvic fracture as cause of stricture. Penobulbar stricture in 45%, penile 33% and 22% had bulbar urethral stricture. Mean length of stricture was 4.9cm (SD + 2.56). 61% patient underwent single stage and 39% two stage procedure. Around 90% of our patients had prior intervention of some form. Overall success rate is 78% with mean follow up was 20 months (+/- 21). 33% patients had complication, one patient had donor site bleeding another developed scrotal haematoma. 6 patients had recurrence of stricture; two underwent optical urethrotomy and are symptom free, Recurrence was seen in 1st year in all patients. On univariate analysis age was statically significant (P-value=0.032) for recurrence, however prior intervention was not statically significant (P-value=0.56), as factor for recurrence. Mean UFM was 16.5ml/sec (SD +7.5ml).

Conclusion: Buccal mucosal graft urethroplasty is versatile technique for complex urethral stricture. Overall success rate is 78%, comparable to results of high volume center internationally. Prior intervention is not statically significant for recurrence (P-value=0.56), however age more than 33 years of age is statically significant (P-value=0.032).

IMPACT OF PRIOR URETHRAL MANIPULATION ON OUTCOME OF ANASTOMOTIC URETHROPLASTY FOR POST-TRAUMATIC URETHRAL STRICTURE
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Objective: To determine the impact of earlier urethral interventions on the outcomes of anastomotic urethroplasty in post-traumatic stricture urethra
Method: From Jan 2008 to Feb. 2010, a total of 42 patients with post-traumatic posterior urethral stricture underwent anastomotic urethroplasty. Eighteen patients had earlier undergone urethral intervention in the form of urethrotomy (5), endoscopic realignment (7), or open urethroplasty (6). Success was defined as no obstructive urinary symptoms, maximum urine flow rate \( > 15 \) mL/s, normal urethral imaging and/or urethroscopy, and no need of any intervention in the follow-up period. Patients who met the above objective criteria after needing 1 urethrotomy following urethroplasty were defined to have satisfactory outcome and were included in satisfactory result rate along with patients who had a successful outcome. Results were analyzed using unpaired t test, chi-square test, binary logistic regression, Kaplan-Meier curves, and log rank test.

Results: Previous interventions in the form of endoscopic realignment or urethroplasty have significant adverse effect on the success rate of subsequent anastomotic urethroplasty for post-traumatic posterior urethral strictures (\( P < .05 \)). Previous intervention in the form of visual internal urethrotomies (up to 2 times) did not affect the outcome of subsequent anastomotic urethroplasty. Length of stricture and age of patient did not predict the outcome in traumatic posterior urethral strictures in logistic regression analysis

Conclusion: Previous failed railroading or urethroplasty significantly decrease the success of subsequent anastomotic urethroplasty. Hence, a primary realignment or urethroplasty should be avoided in suboptimal conditions and the cases of post-traumatic urethral stricture should be referred to centers with such expertise

Two Year Audit of Clinical Presentation, Diagnosis and Management of Transitional Cell Carcinoma of Bladder: Experience at Three Teaching Hospitals of Khyber Pukhtoonkhwa

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Objective: Introduction Transitional cell carcinoma of bladder is a common urological malignancy. It is significantly associated with morbidity and mortality. The biological risks of the bladder tumor like invasion and metastasis are still to be studied and controlled but successful achievements have been made in controlling the clinical risk of bladder tumor in term of recurrences. Objective: To present two year audit of clinical presentation, diagnosis and management of superficial transitional cell carcinoma of bladder in three teaching hospital of Khyber Pukhtoon Khwa

Method: It is a 2 year prospective descriptive study, conducted in Institute of Kidney Diseases (IKD) Hayatabad Peshawar, Ayub teaching hospital Abbotabad and Saidu Teaching Hospital Swat from Jan 2009 till December 2010. Total of 297 newly diagnosed cases of bladder tumors were registered in three hospitals that included 207 patients in IKD, 56 patients in Ayub teaching Hospital Abbot Abad and 34 patients in Saidu teaching hospital Swat. After proper work up, all patients were subjected to TURBT and biopsy was sent for histopathology. All the pre operative, per-operative and post operative details were recorded on structured Performa and were analyzed on SPSS version 17.

Results: The median age of the patient was 47 years (Range 16 - 77 years). 166 (56 %) patients were male. Pain less Haematuria with clots was the major symptom in 267 patients while 25 patients had irritative lower urinary tract symptoms and 5 patients had incidental diagnosis while being booked for TURP. On histopathology 170 patients had superficial bladder tumor, 125 patients had muscle invasive and 2 patients had liver metastasis. There was no significant difference (\( p<0.005 \)) regarding histological difference among three centers. Regarding surveillance in superficial disease, out of 170 patients 47 (28 %) patients had multiple recurrences during 1st year of follow up. Multiple recurrences were treated with intra-vesical Mitomycin. Although we had performed CRP in total of 188 patients for studying its role as predictive factor in muscle invasive TCC, but may be due to the confounding variable of a busy hospital laboratory, we found no significant relation (\( p \) less than 0.005) for CRP.
Conclusion: TCC bladder is a common urological malignancy. Haematuria is a hallmark symptom of TCC bladder. Contrary to the literature, muscle invasive tumors are more prevalent in our set up.

15 YEARS EXPERIENCE OF RADICAL CYSTECTOMY FOR BLADDER CANCER-OUTCOME
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Objective: In the present work, the impact of tumor staging and nodal metastases in predicting 5-year’s survival after radical cystectomy and bilateral pelvic lymphadenectomy for primary bladder cancer is studied.

Method: During the period of 1995 to 2010, 128 patients underwent radical cystectomy and bilateral pelvic lymphadenectomy and urinary diversion at a University Hospital. Patients were identified using medical indexing coding system (ICD 9CM) using standard key words. The patient records were analyzed and follow-up data updated. Disease specific survival, death or recurrence was taken as end point.

Results: Out of 128 patients, 105 (82%) were males and 23 (18%) females with a median age of 60.2 ± 11.1 years (range from 27 to 87 years). Of 128 patients, 34 (26%) patients were excluded from the study because of inadequate follow-up. The mean follow-up was 2.9 years. The overall 5 years survival was 54% with disease specific survival being 51%. Patients with pathological stage T0 at cystectomy have 81.2% 5 years disease specific survival compared to 50%, in patients with pT4 (p=0.346) The 5-year survival for node positive patients was 28%, compared to 44% for node negative patients (p=0.033).

Conclusion: Radical cystectomy and bilateral pelvic lymphadenectomy is the standard treatment for muscle invasive and high-grade T1 cancers, and as salvage for recurrent cancers. Lymphadenectomy has a potential therapeutic benefit. The pathological stage at cystectomy and nodal status are predictors of 5 years survival.

ROLE OF MRI IN THE MANAGEMENT OF URINARY BLADDER TUMOURS
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Objective: Clinical staging methods have low staging accuracies of less than 50%. Multiplanar capability gives MRI an advantage over CT for staging bladder cancer.

Methods: This prospective study was undertaken on 25 patients of proven bladder carcinoma who were candidates for radical cystectomy. They were investigated in a sequential manner, which included complete blood counts, urine examination, liver function tests, kidney function tests, trans abdominal ultrasonography, cystoscopy and biopsy (TUR / cystoscopic) and magnetic resonance imaging (MRI). Radical cystectomy was performed in all patients. MRI staging was correlated with the pathologic staging.

Result: Males predominated among the patients of bladder carcinoma. Majority of our patients were between above 60 years. Haematuria was the main complaint present in 23 (88%) patients followed by pain and LUTS. Routine investigations like complete blood counts, liver function tests and kidney function tests were within normal limits. Urine examination showed presence of malignant cells in 11 (44%) patients. Trans abdominal ultrasonography revealed a bladder mass of varying size in all patients. 6 (24%) patients had hydronephrosis on right and left side each. Cystoscopy was done in all patients, which showed tumor on posterior wall in 11 (44%), left lateral wall in 6 (24%), right lateral wall in 3 (12%), left posterolateral wall in 5 (20%), right posterolateral wall in 4 (16%), anterior wall in 2 (8%), left anterolateral wall in 2 (8%), right anterolateral wall in 1 (4%), trigon in 3 (12%), neck in 2 (8%) & dome in 1 (4%) patients. 15 (60%) patients had a sessile, and 10 had polypoidal mass. Right and left ureteric orifices
were engulfed by the tumor in 3 (12%) patients and 5 (20%) patients respectively. All the patients underwent a preoperative biopsy in the form of Trans urethral resection of bladder tumor in 18 (72%), & cystoscopic biopsy in remaining 7 (28%). All the tumors were histologically shown to be TCC, with 12(48%) of grade 2 & 13(52%) of grade 3 variety. All the 25(100%) patients showed evidence of muscle infiltration on preoperative biopsy MRI was done in all patients using 1.5 Tesla permanent magnet system and assessment of clinical stage was done on T1-and-T2 weighted plain spin-echo images and post gadolinium injection. MRI showed superficial muscle invasion (T2a) in 3(12%) patients; deep muscle invasive tumor (T2b) in 7 (28%) patients; tumor invasion of perivesical fat (T3b) in 12 (48%) patients and tumor involvement of contiguous organs (T4a) in 3 (12%) patient, and lymph node metastases in 7(28%) patients. Radical cystectomy with bilateral pelvic lymphadenectomy was performed in all the 25 patients with construction of an ileal conduit in 15 (60%), bilateral ureterosigmoidostomy in 6 (24%) patient & ileal neobladder in 4(16%) patients. Observations: Correlation of MRI and Pathologic staging

Conclusion: MRI is an efficient non-invasive modality for imaging of bladder anatomy and bladder cancer. Besides difficulties in distinguishing stage TI from stage T2 tumors, MRI is limited by its inability to detect invasion of proximal part of posterior urethra. The low accuracy in the present study could be attributed to small sample size and interpretational errors due to a learning curve. A larger prospective study is however, required for determining the exact role of MRI in the staging of bladder carcinoma.

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CORRELATION OF P53 PROTEIN OVEREXPRESSION WITH GENDER, GRADE AND STAGE OF TRANSITIONAL CELL CARCINOMA OF URINARY BLADDER IN PAKISTANI POPULATION

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Objective: Mutation of p53 gene resulting in overexpression of p53 protein is a frequent event in various cancers and is considered a marker of poor prognosis. We conducted the study to investigate the correlation of p53 protein overexpression with gender, grade and stage of transitional cell carcinoma (TCC) of urinary bladder.

Method: Immunohistochemistry (IHC) was performed to detect p53 protein overexpression on tumor specimen of 61 patients (48 males and 13 females; mean age 63 years) with diagnosis of transitional cell carcinoma of urinary bladder (muscle non-invasive 39, muscle invasive 22) at Shifa International Hospitals, Islamabad, Pakistan. Four patterns of immunohistochemical nuclear staining were observed, including no detectable immunoreactivity (negative); reactivity in less than 10% (weakly positive); 10 to 50% (intermediately positive) and greater than 50% (strongly positive) of tumor cell nuclei. The frequency and pattern of p53 overexpression in relation to gender, tumor grade and stage was recorded.

Results: In the overall patient population, p53 overexpression was negative in 26 % (n-16), while it was weakly positive in 28% (n-17), intermediately positive in 23% (n-14) and strongly positive in 23% (n-14). In males p53 overexpression was negative in 31% (n-15), while it was weakly positive in 29% (n-14), intermediate positive in 23% (n-11) and strongly positive in 17% (n-8). In females p53 overexpression was negative in one case only 8%. It was weakly positive in 23 % (n-3), intermediately positive in 23% (n-3) and strongly positive in 46% (n-6). When both the genders were compared statistically there was a significant difference among males and females based on p53 overexpression (p = 0.03, χ² = 4.54). Female patients showed more overexpression of p53 as compared to male. Strongly positive p53 overexpression was approximately 2 times more common in muscle invasive disease as compared to non-invasive disease (32% versus 18%), and 2.5 times more common in high grade as compared to low grade TCC (32% versus 14%). Similarly stronger p53 overexpression was also noted with advancing tumor stage; pTa(9%), pT1(23%), pT2(36%), pT3(33%) and pT4(50%).
Conclusion: p53 overexpression strongly correlates with high grade and advanced stage TCC of urinary bladder. Though the number of our female patients is only 10, it is interesting that all of them are positive for p53 overexpression; irrespective of the tumor grade and stage. Further studies are required for more meaningful data.

MEDICAL EXPULSIVE TREATMENT OF DISTAL URETERAL STONE USING TAMSULOSIN

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Objective: To evaluate the efficacy of the tamsulosin as an expulsive pharmacologic therapy for the treatment of distal ureteral stone.

Methods: There were 100 patients with 50 patients in each group (A & B). All patients with age > 18 yrs, stone Size ≤ 8mm and stone in distal 1/3 of ureter were included in the study. Patients with proximal ureteric obstruction, distal ureteric stricture, previous ureteral surgery, solitary kidney, aberrent ureteral anatomy (e.g. ureteral ectopia, ureteroceles, mega ureter), UTI and radiolucent stone were excluded from the study. Group A Patients were given Cap Tamsulosin 0.4mg, 1 daily up to 04 weeks while group B patients were given placebo, 1 Cap daily up to 04 weeks. The primary endpoint was expulsion rate. Expulsion time, need for analgesics, need for hospitalization and drug side effects were secondary endpoints.

Result: 49 patients in group A and 48 patients in group B reported back, therefore 97 out of 100 patients were evaluated. Mean age of the patients was 36.34 yrs (rang 18-57 yrs). 43 patients had right ureteral calculus and 54 patients had left ureteral calculus. Mean stone size was 5.78mm (range 4-8mm) in greatest dimension. A stone expulsion rate of 85.71% (42 patients) was noted in group A and 54.20% (26 patients) in group B. Group A reveled a statistically significant advantage in term of stone expulsion rate (P=0.032) as determined by chi square test. Considering expulsion time in days group A showed statistically significant advantage with a P value of 0.015 (chi square test). Regarding age, sex, stone size and stone lateralization (right/left), there was no significant difference between the group A and B. No drug side effects were noted in both the groups.

Conclusion: Medical expulsive therapy should be considered as an option in the management of uncomplicated distal ureteric calculus up to 8mm in size. By using tamsulosin a higher stone expulsion rates can be achieved in a shorter time. More randomized control trials are required to establish tamsulosin as a standard medical expulsive treatment for small distal ureteral calculus.

SAFETY AND EFFICACY OF STONE CONE DURING URETERORENOSCOPIC (URS) LITHOTRIPSY FOR OBSTRUCTIVE URETERIC CALCULI

Ata Ur Rahman, Anayat Ullah, Muhammad Kamran Khan, Muhammad Ashfaq

Objective: Proximal migration of stone fragments during ureterorenoscopic lithotripsy is a common problem influenced by pressure of irrigation solution, type of energy for lithotripsy, site and degree of fixation of the stone to the ureteral wall, and degree of proximal ureteral dilation. The Stone Cone (Boston Scientific Corp, USA) is a device that helps to prevent proximal migration of fragments and favors a safe extraction during ureteroscopic lithotripsy. Objectives: To assess the efficacy and safety of stone cone during ureterorenoscopic lithotripsy for obstructive ureteric calculi.

Method: A randomized controlled study conducted in our department from January 2010 to December 2010. Total 50 patients with mean age 42 years (range 9 +/- 68) underwent URS for ureteric stone. Patients were randomly
divided into group A, 25 patients (URS with stone cone) and group B, 25 patients (URS without stone cone). Rigid 8 Ch Storz ureteroscope and pneumatic Swiss lithoclast Master EMS® was used in all cases.

Results: In group A, proximal migration of whole stone or clinically significant fragment ≥ 5mm occurred only in 1 patient(4%) which was treated with ESWL, while in group B, 11 patients(44 %) were treated with ESWL for proximal migration of stone fragment or whole stone. Ureteric Stent was used in 9 patients(44%) group A, while 17 patients(68%) of group B were stented. No significant complication was noted during the study.

Conclusion: Stone Cone is a safe, effective and easy to use device. The small extra cost can be balanced by reduced rate of post-operative ESWL and application of ureteric stent.

EFFICACY OF ALFUZOSIN (ALPHABLOCKER) AFTER EXTRA CORPOREAL SHOCKWAVE LITHOTRIPSY FOR PASSAGE OF RENAL CALCULI.

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Urology, The Kidney Centre

Objective: To determine the efficacy of Alfuzosin (alpha blocker) on stone clearance after Extracorporeal shock wave lithotripsy for renal calculi.

Method: A prospective, randomized, controlled study was carried out in 130 patients who underwent ESWL for renal calculi between February and August 2010. Group A ( n=65 ) took Alfuzosin 10 mg once daily and standard analgesia on demand. Group B ( n=65 ) took only standard analgesia as needed. Patients were on this regimen until stone clearance and were followed up for a maximum of three months. They were evaluated for stone clearance at three months. Statistical analysis was performed using chi square test.

Results: The demographic profile was comparable in both groups. Group A ( Alfuzosin group ) had a clearance rate of 86.2 % ( 56 out of 65 ) versus 66 .2 % ( 43 out of 65 ) in Group B ( Control group ) with p value = 0.01. None of the patients experienced hypotension or other side effects in study group.

Conclusion: Alfuzosin as an adjunctive treatment along with ESWL of renal calculi significantly increases stone clearance.

KEY WORD : Alpha blocker, Renal calculi, Extracorporeal shockwave lithotripsy, Alfuzosin.

OPTIMAL MANAGEMENT OF LOWER POLE RENAL CALCULI 15-20 MM

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Urology, Aga Khan University

Objective: Renal urolithiasis is a common problem’s disintegrates the stone using shockwaves but there are limitations with its success rate and other minimally invasive modalities for kidney stones such as Percutaneous Nephrolithotomy is also widely applied To compare the stone clearance rate and short term morbidity of Shock wave lithotripsy (SWL) with the Percutaneous Nephrolithotomy (PCNL) for lower pole renal stones measuring 15-20 mm.

Method: In period between January 2005 and January 2010, 79 patients, 43 in SWL and 36 in PCNL group with 15-20mm stone size were included in the study. Preoperative imaging (CT KUB/IVU/X ray/ Ultrasound) were used to assess stone size, charts were reviewed retrospectively and stone free rates were assessed with X ray and US in follow up for 3 weeks. Data was analyzed using t test and chi square test.
Results: At 3 weeks, 81% of patients undergoing PCNL were stone free compared to 21% in SWL group. 22% of patients in SWL modality needed ancillary procedures in comparison to 5% of PCNL patients. PCNL complication rate was 8% versus 6% in SWL patients.

Conclusion: Stone clearance from lower pole stones sized 15-20 mm in diameter following shockwaves lithotripsy is poor. These calculi can be better managed with percutaneous surgery due to its high degree of efficacy and acceptably low morbidity.

RENAL TRANSPLANT OUTCOME IN PATIENTS WITH NORMAL AND ABNORMAL URINARY TRACT - A SINGLE CENTRE STUDY IN PEDIATRIC POPULATION

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Objective: To compare the outcome of renal transplant in children with pre-transplant corrective surgery for urinary tract abnormalities versus children with normal urinary tract.

Method: At Shifa International Hospitals, Islamabad, Pakistan, 24 pediatric renal transplants were done between August, 2002 to April, 2010 in children (58%, male-n=14 and 42% female n=10) with mean age of 12.25 years (range 5-18yrs), and median follows up of 74 months (range 3-99 months). Causes of end stage renal disease included renal parenchymal disease (RPD) (group-I, n=16) and congenital urinary tract anomalies (group-II, n=8). Group-II patients included reflux nephropathy (n-5), posterior urethral valve (n-1), neurogenic bladder (n-2), and underwent pre-transplant corrective surgery including nephrectomy/nephroureterectomy (n-7), augmentation cystoplasty (n-2), and mitrofanoff procedure (n-4), ureteric reimplantation (n-1),2 weeks to 5 years pre-transplant.

Results: To date patient survival is 100% while graft survival is 92%. Overall graft function (mean serum creatinine) at post Transplant 3- month, year-01, 02 and recent year is 1.09, 0.91 1.08 and 1.23mg/dl respectively. There was no significant difference between mean serum creatinine level of group-I (1.11mg/dl) and group-II (1.43mg/dl) patients at the recent follow up. Acute rejection was observed in 4 patients,3 patients from group-I while 1 patient from group-II.Two patients lost graft due to chronic allograft nephropathy both from group-I.Three patients suffered complications related to corrective surgery with no adverse effects on graft. Although group-II patients have higher incidence of lower urinary tract infection but have comparable graft function.

Conclusion: Pre-transplant surgery for correction of urinary tract anomalies offers equally good graft survival and function as compared to children with normal urinary tract. complications related to corrective surgery pose no additional threat to graft function and survival.

KIDNEY TRANSPLANTATION IN PATIENTS WITH LOWER URINARY TRACT ABNORMALITIES

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Objective: Patients with lower urinary tract dysfunction frequently have end stage renal disease requiring renal replacement therapy. Lower urinary tract of these patients should be reconstructed before transplantation to prevent recipient morbidity and graft loss. Augmentation cystoplasty with Mitrofanoff has been proposed as an alternative for reconstruction of the urinary tract which renders good capacity and continent bladder with low filling pressure. Objective is to study the effect of enterocystoplasty with mitrofanoff in renal transplant recipients.

Methods: Between 1985 and December 2009, 2792 renal transplants were performed at our Institute. Those who had suspicion of lower urinary tract dysfunction were subjected for cystourethrography and urodynamic investigations. We found 30 patients with severely altered bladder capacity and compliance. These patients were between 10 - 50 years of age (mean 22.46) Some of the patients had optimizing surgeries like native nephrectomies and/or augmentation
cystoplasty with Mitrofanoff prior to transplant. Time lapse between augmentation cystoplasty and transplant in majority of cases was three months. There were 22 adults and 8 pediatric patients. Males were 28 (93.3%) and females were 2 (6.7%). All patients received kidney from live related donors.

Result: Bacteriuria and symptomatic lower urinary tract infection occurred in all patients. E.coli, Pseudomonase, Klebsiella, Citrobacter and Morganella were the organisms isolated from the urine. Post transplant urodynamic studies showed adequate vesical capacity (350 – 450 ml) and normal filling pressures ranging between 10 – 25 cmH2O pressure. The low filling pressures render the upper tract safe in these patients. After a follow-up of 3 to 48 months all the patients were alive with functioning graft and creatinine ranging from 1.0 to 1.8 mg%. Cystography showed no VUR and no significant post micturition residue. All patients were continent. The average procedure time was 105 minutes (range 75–180). The mean hospital stay was 3 days(range 2-7). The average stone size was 3.9 cm(range 3.1-5.8). A single tract was made in 45 patients(86.5%), while multiple tracts were used in 7 procedures(13.5%). In 41 patients(78.84%), complete stone clearance was achieved after a single session of PCNL. The procedure was staged in 4 patients and a repeat PCNL was performed. With dual therapy (PCNL + ESWL), stone clearance was achieved in 48 patients(92.3%). Complications encountered were bleeding, four patients, nephrectomy one patient, pneumothorax, one patient, urosepsis in one patient and dynamic illus in two patients.

Conclusion: Our experience suggests that bladder augmentation is an acceptable method although not exempt from complications and it gives a fair chance of living with normal renal functions compatible with an active life.

RATIONAL USE OF UNENHANCED MULTI-DETECTOR CT (CT KUB)
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Objective: CT KUB is slowly replacing IVU as primary imaging modality in evaluation of suspected renal colic. It is not only ordered by Urology department but also by other specialties. With its countless advantages it also carries risk of high radiation dose so risks versus benefits should be taken in consideration before ordering CT KUB. Objective: To assess the yield of CT KUB across the specialties and need of developing an algorithm to order CT KUB.

Method: It was a retrospective analysis of 240 CT KUBs done as primary imaging modality to evaluate suspected renal colic. All patients who underwent CT KUB within the duration of 6 months study period (Jan 2009 to June 2009) were included in our study. Patients with any positive urological imaging in past 6 months or those who were diagnosed to have urolithiasis in last 6 months were excluded. CT referrals by outside physician were also excluded along with those who had missing data.

Results: There were total of 529 CT KUBs ordered during the study period. Of which 240 met the inclusion criteria. The overall positive yield for urolithiasis was 62%, negative rate was 19% and rate of incidental findings was 19%. Urology dept. has the highest positive yield of 67% followed by Emergency dept (ED); p< 0.022. Rate of incidental finding was highest in CT ordered by other specialties (42%). Patients with flank pain had more than 65% chance of having a positive CT scan for Urolithiasis and those with flank tenderness had more than 70% chance of having a positive CT for urolithiasis, in comparison to patients with normal examination (50%).

Conclusion: There is statistically significant difference of yield across specialties. Tool of good history taking and physical examination along with urinalysis has proved to be essential steps in algorithm of ordering CT KUB.
RISK FACTORS FOR SYMPTOMATIC COMPLICATIONS OF DOUBLE ‘J’ URETERAL STENTS: AN ALYTICAL STUDY AT INSTITUTE OF KIDNEY DISEASES HAYATABAD PESHWAR
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Objective: Background Endourological procedures are commonly performed worldwide. Advances in minimally invasive treatment of Urolithiasis have been facilitated by the development of small-caliber semi rigid or flexible ureteroscopes, however, most patients will require a stent at some point during management either to relieve or prevent ureteral obstruction after these procedures. Indwelling ureteral stents are in variably associated with mild to severe lower urinary tract symptoms however little has been established as risk factors for more severe stent related symptoms. As well said by Hippocrates that quality of life is more important than life itself, so we have aimed to find out the predictive factors for stent related symptoms. Objective: To determine the risk factors of stent related lower urinary tract symptoms

Method: It is a prospective analytical study that was conducted in the department of Urology Team at Institute of Kidney Diseases Peshawar from Jan 2009 till June 2010. Total numbers of 165 Ureteroscopies with Intracorporeal lithotripsy followed by DJ stenting were performed in study duration. All of the stents were made of polyurethane (Cook Ireland Ltd., Limerick, Ireland). One week after URSL, a plain (KUB) film were obtained for all the patients in OPD to confirm the stent position and the presence of residual stones. Patients were regularly followed at 2 weeks interval. The stents related symptoms was categorized as 0 (No symptom), 1 (Mild Symptoms), 2 (Moderate symptom) and 3 (Severe symptoms) and its relation with length, duration, positions of upper and lower coil of DJ stent was recorded on structured Proforma and was analyzed on SPSS version 17.

Results: The mean age of patient was 40.2±10, 103 (62.4 %) patients were male and 59 (35.7%) were female. The mean stone size was 12.2 mm (Range 9-20mm). Right ureter was involved in 94 patients while 71 patients had left ureteral calculus diseases. We recorded Nocturia in 150 (91 %) patients, Frequency in 142 (86 %), Urgency in 124 (75 %), Urge Incontinence in 77 (47 %), Bladder pain and flank pain in 111 (68%) and Gross Haematuria in 66 (40 %) patients. The individual mean symptom score for nocturia 1.34 ±1.4, frequency1.69 ±1.61, urgency 1.46±1.64, urge incontinence was 0.86 ±1.37. In multi variate analysis More length, and crossing the midline of the distal end of DJ stent was significantly (p=0.001) associated with severity of frequency, urgency, bladder pain and haematuria. Laterality, body weight and gender were not significantly (p>0.05)related with LUTS, Flank pain and Haematuria

Conclusion: DJ stenting is a commonly performed endoscopic procedure in Urological surgery. It is associated with LUTs, Bladder pain and haematuria. More length and crossing the midline of the distal end of DJ stent are independent risk factors for symptomatic complication of DJ stent

OUTCOME OF CONTINENT CATHETERIZABLE CONDUITS IN URINARY TRACT ; A SINGLE CENTER STUDY
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Objective: We reviewed our experience of continent catheterizable conduits constructed at our center, evaluating the success and long-term complications

Method: Twenty-six patients (18 male and 8 female) underwent continent catheterizable stoma formation between June 2000 and February 2009 for various abnormalities of lower urinary tract at Shifa International Hospitals, Islamabad, Pakistan. Mean age was 20 years (range 3-62 years) while median follow up was 30 months (range 1 week +/- 104 months). Conduit source (27) included appendix (21), tapered ileum (4), and ureter (2). Stoma was located in right lower quadrant (20), umbilicus (4), and left lower quadrant (2). Thirteen patients underwent
augmentation cystoplasty in conjunction with mitrofanoff procedure using ileum in 6, native ureter in 3, cecum in 1, ileocecum in 1, autoaugmentation in 1 and bladder diverticulum in 1 patient.

Results: Conduit was functional in 23 patients. Stomal continence was achieved in 22 patients. Long-term conduit related complications included stomal stenosis in 3, stomal regression in 1 and channel stricture in 3. Stomal revision was performed in 3 patients, which was successful. Channel stricture was successfully dilated in 2, while channel was abandoned in 1 patient. Two patients required complete revision of Mitrofanoff, which was successful.

Conclusion: Continent Catheterizable conduits are reliable method of intermittent catheterization to empty the urinary reservoirs constructed for various reasons.

LATEX GLOVE” LAPAROSCOPIC PYELOPLASTY MODEL-A NOVEL METHOD FOR SIMULATED TRAINING
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Objective: Laparoscopic pyeloplasty is one of the challenging urological procedures to master, due to its technical difficulties. Simulators developed in the west help overcome the related learning curve, however are associated with higher costs. Here we present a 'latex glove' lap-pyeloplasty model, and determine its construct validity.

Methods: The Latex glove model was used, to perform Laparoscopic Pyeloplasty by 5 operators with variable level of experience, ranging from an experienced (>20 independent Laparoscopic pyeloplasties) to minimal operative experience (year V medical student). The palm of the glove was considered renal pelvis with finger of the glove as proximal ureter. A knot at the junction of the two was considered as ureteropelvic junction obstruction. A basic lap trainer was used to simulate the LPP. Operative time was noted in minutes and quality of continuous suturing was determined for each operator, using a previously described non validated scoring system by a blinded reviewer. SPSS 16 was used for statistical analysis.

Result: The operative duration varied from 47 min to 160 min for most to least experienced operator, and the differences were statistically significant (p=0.043), while the quality of suturing score ranged from 1 to 6 (p= 0.038) for most to least experienced respectively. The operative time and quality of suturing negatively co-related with the level of experience (-0.962 and -0.987 respectively) which was statistically significant (p= 0.009 and p=0.002 respectively).

Conclusion: This novel training model has proven its validity, as a cost effective and readily available option for laparoscopic pyeloplasty training.

INITIAL EXPERIENCE OF LAPAROSCOPIC PYELOPLASTY FOR URETERO PELVIC JUNCTION OBSTRUCTION AT A TERTIARY CARE HOSPITAL
Rajab Ali Ghirano, Khurram Siddiqui, Urology, Surgery, Aga Khan University Hospital, Urology, Surgery, Aga Khan University Karachi

Objective: Laparoscopic Pyeloplasty is a minimally invasive procedure for ureteropelvic junction obstruction. This technique has evolved and now becoming the standard of care in ureteropelvic obstruction.

Method: we are presenting the data of our initial eleven cases underwent laparoscopic pyeloplasty from 2008 to 2010.

Results: The mean age of our patients was 24.7 years, with mean duration of symptoms 16.09 months. Most common site was left, with mean duration of surgery 237 minutes and most of our patients had three ports. All our
cases were stented and our mean length of hospital stay was 3.45 days. Follow up MAG III scan available in three cases, revealed stable function with no outflow obstruction.

**Conclusion:** Laparoscopic pyeloplasty is technically difficult procedure with steep learning curve, is an effective alternative to open Pyeloplasty.

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**TWO YEARS EXPERIENCE OF URETERO-VAGINAL FISTULA AT AFIU RAWALPINDI**

*Badar Murtaza, Arshad Mahmood, Waqar Azim Niaz*  
AFIU Rawalpindi

Objective: To evaluate the presentation, diagnosis and the treatment modality of uretero-vaginal fistula at AFIU Rawalpindi. To highlight the post-operative sequel of the uretero-vaginal fistula

Methods: This study included 19 cases of uretero-vaginal fistula. Their clinical presentation and the investigative modalities were recorded. The operative modality contemplated was noted and the post operative results were evaluated. The data was entered in structured proforma and analyzed for descriptive statistics using SPSS version 14.

Result: Over the span of 2 years, 19 cases of uretero-vaginal fistula were managed at the AFIU Rawalpindi. The age was 20 – 36 years (27.23 + 4.61). The fistula was noted on left side in 18 cases (94.7%), while only one case (5.2%) showed a fistula on the right side. All cases were seen after caesarean section. 15 cases (78.9%) were secondary to the caesarean section performed in an emergency by the registrars/junior doctors. The diagnosis was made on the history of incontinence with normal act of micturition, ultrasonography abdomen/KUB and intravenous urography. All were subjected to preliminary cystoscopy with ureteric catheterization/assessment followed by definitive procedure. 17 cases (89.4%) were managed with ureteroneocystostomy over a DJ stent while 2 cases (10.5%) required Boari Flap reconstruction over a DJ stent, due to the inadequate length of the distal ureter. Post operatively only one case (5.2%) had superficial wound infection, which was managed by wound debridement. No other complication was noted. The surgical intervention was performed from 4 to 8 weeks (5.12 + 1.78) after the caesarean section.

Conclusion: Uretero-vaginal fistula is one of the complications of the emergency caesarean section in the hands of inexperienced surgeons. Prompt diagnosis and surgical intervention is the key to success. Intervention can be done as early as 4 weeks after the development of the fistula, in order to avoid the renal damage.

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**RETROSPECTIVE STUDY OF 426 CASES OF FEMALE UROGENITAL FISTULAS AT THE DEPARTMENT OF UROLOGY & TRANSPLANTATION CIVIL HOSPITAL QUETTA**

*Haq Nawaz, Masha Khan, Saadat Khan*  
Bolan Medical College, Quetta

Objective: The objectives of this study were to review our experience in causes, diagnosis and basic principles of surgical treatment of urogenital fistulas.

Methods: A retrospective study of 213 patients with different types of urogenital fistulas was reviewed between October 1995 to October 2010. They were analyzed with regard to age, parity, casual factor, mode of treatment and outcome. Patients were also evaluated at two weeks initially, three monthly and later depending upon symptoms.

Result: We reviewed our series of female urogenital fistulas that have been treated over a 15 years period. Out of these 213 cases 133 (62.44%) were Vesico vaginal fistulas, 54(25.35%) were Urethro vaginal fistulas and 26 (12.2%) were Uretero vaginal. Majority of the patients were young in child bearing age between 16 and 30 years of
age, although age range was wide i.e., 11 to 50 years. The most common cause of urogenital fistulas were Obstetrical trauma due to obstructed labor in 50(37.59%) & Gynecological (hysterectomy 25(18.79%) & caesarian section in 9 (6.77%). Patients of Uretero vaginal fistulas were mainly due to unrecognized ureteral injuries during Gynecological procedures (hysterectomy in 17 cases & caesarian section in 5 cases. For repair of vesico vaginal fistulas Trans vaginal route for repair was used in 53(39.84%) patients, while Trans abdominal route for repair was used in 70 (52.63%) patients. We had 16 (12.03%) failures in Vesico vaginal fistulas with a success rate of 88%.

Conclusion: Management of Urogenital fistulas is among the most distressing complications of obstetric and gynecologic procedures. The patients suffer physically, emotionally and socially. The lack of skilled supervision and adequate obstetric emergency facilities are to blame.

SHORT TERM OUTCOME AND COMPLICATIONS OF TENSION FREE VAGINAL TAPE IN PAKISTANI WOMEN

Ayesha Saleem
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Objective: The aim of the present study was to evaluate the short-term outcome and complications of tension free vaginal tape (TVT) in Pakistani women.

Methods: Thirty women with stress in continence without pelvic organ prolapse underwent tension free vaginal tape with a follow-up of six months to one year was included. Patients with symptoms of mixed incontinence, UTI, post voided residual more than 30 ml were excluded. A standardized urogynaecological history including urinary questionnaire taken and physical examination performed pre-operatively, one week, three months, six months and one year after the surgery. All patients had a cough test, performed with a bladder volume≥ 300ml in semilithotomy and standing positions. Pad test was performed. Considering the facts given by International studies that urodynamics has a low predictive value to reproduce clinical findings of lower urinary tract symptoms, we did not perform urodynamics to keep the study simple and cost-effective. TVT were performed through standard technique. Intra-operative variables included total operative time, estimated blood loss reviewed as well as post-operative early(within seven days) and late complications (within 6 months to one year were ascertained. Outcome measured according to IUGA recommendations.

Result: The Objective and subjective cure rate was 99%. No significant blood loss, which required transfusion, was observed. Post-operative Hemoglobin drop not more than 1 gm %. Mean operative time was 32 min (25-40 min). Though there was one bladder perforation but other complications were not observed in our patients. None of our Patient had Post-operative voiding dysfunction. Only four of the patients had Post-operative urinary tract infection.

Conclusion: TVT is a safe and effective procedure for stress urinary incontinence.

ANTEROR COMPARTMENT DEPECT: LOWER URINARY TRACT (LUT) SYMPTOMS AND OUTCOME OF SURGERY.

Ayesha Saleem
The Kidney center PGTI, Karachi

Objective: To determine pattern of LUT symptoms in women with isolated cystocele and assessed the outcome of surgery on LUT symptoms.

Methods: We prospectively evaluated 70 consecutive neurologically intact women with anterior wall prolapse > grade 2 and LUT symptoms. Exclusion criteria were concomitant DM, UTI, SUI, rectocele or any existing vaginal vault or uterine prolapse.
Clinical assessment included focused history, urinary questionnaire, voiding diary and physical examination performed pre operatively and one week, six weeks and three months after the repair. Pelvic organ prolapse was evaluated according to Baden Walker system. Urine culture, U/S KUB, post void residual and uroflowmetry were the investigation reviewed pre and post operatively. Traditional anterior pelvic floor repair performed.

Result: The mean age of the women was 47 (48-65 years)> on physical examination 18 had grade IV while in 52 Grade III defect was observed. Hesitancy, intermittency, sense of incomplete emptying was observed in 47, 53 and 64 women respectively. Thirty percent, 12.8% and 20% had frequency, nocturia and urgency respectively.

All of the patients had post-void residual ≥ 124 ml (124-416 ml) and < 18 ml/s maximum flow rate. Postoperative assessment revealed unchanged LUT symptoms in 7(10%) women, while 63(90%) women reported resolution of symptoms. Post-void residual reduced in 69 female less than 50 ml. While in one it remained at 377 ml who had pre-operative PVR 416 so was advised for CIC.

Conclusion: The findings suggest that anterior wall prolapse associated with LUT symptoms surgery is an effective treatment for the defect

**BILATERAL ORCHIECTOMY WITH OR WITHOUT FLUTAMIDE FOR ADVANCED CARCINOMA PROSTATE**

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Objective: The objectives of our study is to assess the effects of flutamide in treatment of advanced carcinoma prostate with bilateral orchiectomy

Method: This comparative study was conducted in Institute of kidney diseases Hayat Abad Medical Complex Peshawar, from March 2008 to July 2009. Total of one hundred patients were subjected to this study. Two groups were assigned group A and group B, both the groups who had advanced carcinoma prostate were undergone for bilateral orchiectomy. Group A consisted of fifty patients that got treated with flutamide while group B also included fifty patients and that had been given placebo.

Results: Both the groups were come across with certain adverse and good effects. Relief of bone pain and hot flushes were quite well responsive in group A than B. So far the adverse effects in group A nausea, vomiting, diarrhea and anemia were 5, 2, 4, 6 % patients respectively while in group B that were 4, 2, 2.4 % patients respectively. Eight patients in each group were lost to follow up.

Conclusion: The benefit of combined androgen blockade is better in terms of relief of bone pain and hot flushes

**KNOWLEDGE, ATTITUDE AND PRACTICE (KAP) REGARDING PROSTATE SPECIFIC ANTIGEN (PSA) AND PROSTATE BIOPSY**

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Objective: To determine the knowledge, attitude and practice of urology residents and consultants regarding prostate specific antigen (PSA) and prostate biopsy

Method: This study was conducted at the monthly meeting of PAUS in December 2010 held at AKUH. A verbal informed consent was obtained from all participants and they were given a questionnaire regarding PSA and prostate biopsy. The responses were grouped into excellent (>80%), good (60 to 79%), average (40 to 59%), poor (20 to 39%) and very poor (<20%).
Results: Total number of responders was 27, with 12 (45%) consultants and 15 (55%) residents. Only 11% gave correct answer with regard to the normal (median) value of PSA, while only one third of the responders considered PSA velocity to be the most important marker for prostate biopsy. Thirty percent considered Mid-life PSA to have prognostic significance and 37% each considered octant biopsy and 12 core biopsy to be adequate for a diagnosis of prostate cancer. Vast majority of responders (63%) considered rising PSA to be an indication for repeat biopsy and similarly 70% were reluctant to do it in patients on aspirin. Regarding practices of antibiotic prophylaxis, 44% considered combination of Flouroquinolones and Metronidazole to be an appropriate regimen. Twenty six percent of responders did not consider any analgesia following prostate biopsy and 37% left it to the person performing the biopsy. Thirty percent of the responders correctly identified the risk of sepsis following prostate biopsy.

Conclusion: Overall knowledge of urologist is variable between one area to another ranging from very poor to excellent. Most of the practices were against the recommended guidelines. In view of these conclusions, more efforts are needed to direct a guideline based urological practice, offering improved standard of care for a third world population.

OUTCOME OF AUGMENTATION CYSTOPLASTY IN PEDIATRIC AGE GROUP WITH NEUROGENIC BLADDER
Ata Ur Rahman, Anayat Ullah, Muhammad Ishfaq, Sarhad Khan,

Objective: Augmentation cystoplasty (AC) is used in adults and children who lack adequate bladder capacity or detrusor compliance. It can provide a safe functional reservoir that allows for urinary continence and prevention of upper tract deterioration. Because the augmented bladder typically empties poorly, the introduction of clean intermittent with or without mitrofanoff procedure allowed convenient, controlled bladder emptying of a safe and functional reservoir. Objectives: To evaluate the outcome of augmentation cystoplasty in pediatric age group with neurogenic bladder.

Method: It was a retrospective study and patient record was evaluated who has undergone augmentation cystoplasty from January 2001 to January 2010. Additionally, standardized interviews and relevant investigations were performed to evaluate the postoperative outcome. All information was collected on a structured proforma and was analyzed on a computer using SPSS version 10 for window XP.

Results: Augmentation cystoplasty was performed in 21 patients, 15 with combined mitrofanoff procedure using appendicular stump and 12 patients with bilateral ureteroneocystostomy. The mean age was 8 years (range 3 to 13). Nineteen patients (90.5%) were socially continent. The mean bladder volume was 320 ml (range 280 to 450) and the mean bladder compliance was 13.7 ml/cm of H2O (range 11.9 to 14.2). Renal functions remain stable in 20 patients (95.2%) and deteriorated in one patient (4.8%). Complications encountered were recurrent UTI in 5 patients (23.8%), Bladder calculi 3 patients (14.2%), stricture of vesicostomy 3 patients and intestinal obstruction in one patient. No malignancies were detected yet.

Conclusion: Augmentation cystoplasty preserve renal functions and provide urinary continence in most children with neurogenic bladder.

DOES CONSANGUINITY OF PARENTS INCREASE THE RISK OF HYPOSPADIAS IN CHILDREN?
Qureshi AH, Alam Z, Zaidi SZ
The Indus Hospital Karachi

Objective: To assess if consanguinity of parents increases the risk of hypospadias in children.
Methods: A cross sectional case-control study was conducted at the Indus Hospital, Karachi, where consecutive children (age 14 years and below) presenting to the urology outpatient clinic with isolated hypospadias were included in the study. A total of 42 children were enrolled between January 2008 and January 2011. This group of 42 cases was compared to a similar number of controls, which were children presenting to paediatric clinics with other diagnoses. In case of children with hypospadias, details of type of anomaly were recorded, and parents were questioned regarding consanguinity, defined as first cousin marriages only. Consanguinity for parents of children in the control group was noted.

Result: 42 children in the case group were compared to 42 children in the control group. The mean age in both groups was 9.9 years and 6 years respectively. Hypospadias was classified as penoscrotal (n=14), midshaft (n=10), subcoronal (n=12), distal penile (n=3), coronal (n=2) and proximal penile (n=1). 52.4% (22/42) of children with hypospadias were born of consanguineous marriages as compared to 38% (16/42) of consanguineous marriages in the control group. The p value is calculated to be 0.188, which does not show a significant correlation. Similarly, significant correlation was not found between the severity of hypospadias and consanguinity of parents (p=0.46).

Conclusion: Although a familial pattern of hypospadias has been recognized, no specific genetic traits have been established. In this study, we have found consanguinity to be more common in parents of children with hypospadias as compared to control. However, this is not a statistically significant finding. One factor that needs to be taken into account is the relatively small size of the study population. A larger study population will be needed to arrive at a conclusive finding.

CURRENT CIPROFLOXACIN SENSITIVITY PATTERN OF CLINICAL ISOLATES FOUND IN URINE SAMPLES
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Undergraduate MBBS student, Dow Medical College, DUHS.,

Objective: To evaluate the prevalence of infectious agents found in urine samples and to determine their sensitivity pattern to ciprofloxacin.

Method: An observational study. 1997 urine samples obtained from individuals presenting at a private lab and its branches in key areas of the city, during a period of 10 months, from February to December 2010, were inoculated on selective agar EMB and CLED agar and isolates were identified by routine procedures. These strains were assayed for antibiotic Ciprofloxacin by Culture sensitivity process. The data was sorted and subjected to statistical analysis on SPSS version 16.

Results: Out of 1997 specimens, 1605(80.4%) were gram-negative rods, and 392(19.6%) gram-positive isolates. E.coli (43%), however, were most frequent, followed by Klebsiella (22.4%) and Staphylococcus aureus (15.5%), while Pseudomonas, Enterobacter, Enterococcus, Proteus, Candida, Salmonella typhi and Strep. agalactiae were less prevalent. In vitro culture sensitivity test indicates Ciprofloxacin to be more resistant. In gram negative bacteria, 54.5% resistant and 45.5% were sensitive while for gram-positive isolates, 50.7% resistant and 49.3% sensitive.

Conclusion: Our study shows generalized decrease in bacterial susceptibility to ciprofloxacin in our population. Empirical initial treatment with ciprofloxacin is therefore inadequate in more than half of UTI cases, recommending culture sensitivity testing before the administration of antibiotics to satisfactorily treat Urinary tract infections.

RISK FACTORS FOR HIGH RESISTANCE OF CIPROFLOXACIN IN COMPLICATED URINARY TRACT INFECTION
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Objective: Urinary tract infection (UTI) is the most common disease in the urology clinics across the globe, and still it bears significant morbidity and even mortality in modern medicine. There are several pharmacological antimicrobial therapies available for the treatment of UTI but the increasing prevalence of infections caused by antibiotic-resistant bacteria makes the empirical treatment of UTIs more difficult. The earlier report of sensitivity for the Ciprofloxacin was very encouraging in uncomplicated as well as complicated UTI reaching almost 95%. But the current data suggests a high resistant rate. To determine the risk factors for high resistance of ciprofloxacin in complicated urinary tract infections

Methods: It is an analytical study that was conducted in department of Urology (Team ‘C’) at Institute of Kidney Diseases Hayatabad Peshawar from 1st June 2009 till 31st December 2009. Total numbers of 100 patients with complicated UTI was selected in the study. Multivariate analysis and linear regression was performed for the detection of risk factors. All the data was recorded on structured Proforma and was analyzed on SPSS version 17.

Result: The mean age of the patient was 55.6 years (Range 3-82 years). 62 patients were male while 38 patients were female. 66 isolates of E-Coli were found sensitive to ciprofloxacin while 34 isolates were found Resistant for ciprofloxacin. Using multivariate analysis and linear regression an increasing age above 50 (p=0.002) History of urinary catheterization especially for bladder outflow obstruction (p=0.001) and previous multiple use of ciprofloxacin (p=0.001) and poor brand of ciprofloxacin were found to be independent risk factors for high resistance of ciprofloxacin.

Conclusion: Ciprofloxacin should also be used cautiously both for uncomplicated and complicated UTI because of emerging resistance. The risk factors for emerging resistance are increasing age, urinary catheterization and multiple use of ciprofloxacin in one year.

EBM- The scientific impact of papers presented in the UROCON 2011

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Introduction: Evidence based medicine (EBM) has now clearly revolutionized the clinical practice and use of guidelines has achieved its popularity, as well as effectiveness. The evidence is categorized by the Oxford center for EBM level of evidence and subsequent grades of recommendations. This study aims at reviewing the data presented in the UROCON 2011, and determining the level of evidence for EBM in urology, within Pakistan.

Methodology: We reviewed all the abstracts accepted for presentation at the 2011 UROCON meeting. The studies were divided according to the subject area, area of publication and type of institute. The study type was determined and the level assigned according to the type of evidence, based on the standard criterion made by the OCEBM.

Results: A total of 67 abstracts were accepted for publication, out of which 3 were excluded as they were from outside the country. All of the abstracts were from academic institutions, with most coming from the province of Sindh (54.7%), followed by Khyber-Pakhtunkhwar (KP) (21.8%). Highest level of evidence was of 1b, seen in 9.4% of studies, of which most of them
were from KP province. The most common level of evidence was 3, seen in 58% of studies. Most common area of work was on Stone (31%), while only 3.1% of papers were on Laparoscopy and basic science studies.

Conclusion: There is variety of topics presented in the UROCON 2011. The type of evidence presented, mostly comprises of low level of evidence according to the center of evidence-based medicine, exhibiting a poor impact. There is a dire need in improvement of the level of evidence in order to attain a better scientific impact.

FOURNIER’S GANGRENE. A SERIES OF 64 CASES.
Haq Nawaz, Masha Khan, Saadat Khan, Bolan Medical College, Quetta
Objective: Fournier’s gangrene is a rapidly progressive necrotizing, fulminant infection of the scrotum, perineum and lower abdominal wall, which can extend along the groin, caused by synergic aerobic and anaerobic organisms

Methods: The records of 64 patients diagnosed with Fournier’s gangrene were retrospectively analyzed. The age, sex, predisposing factors, bacteriologic causes and methods of treatment studied were recorded.

Result: They were all males except one female, age ranging from 7 – 70 years. The main sign and symptoms were pain, swelling of scrotum and fever. The associated condition with the Fournier’s gangrene were diabetes mellitus and prolonged hospitalization along with catheterization due to leukemia and cerebro vascular accidents. After initial starting of antibiotics, aggressive wound debridement was done. The hospital stay was 15 – 60 days. Seven patients died due to septicemia and cardiac problems.

Conclusion: Early recognition, repeated and aggressive debridement, intensive care treatment and antibiotics are mandatory to prevent irreversible endotoxic shock.

UREPTHROPLASTY WORK AT PIMS
Muhammad Naeem, Pakistan Institute of Medical Sciences Islamabad
Objective: We reviewed our experience with anastomotic urethroplasty for bulbar and posterior urethral strictures and substitution urethroplasty for pendulous and long bulbar urethral strictures.

Methods: Etiology of stricture, mode of presentation and history of previous treatment were recorded. Stricture length was assessed by retrograde urethrogram and antegrade cystourethrography.

Result: During last 10 years 87 urethroplasties were done, 70 end to end anastomotic and 17 substitution urethroplasties by using penile pedical flaps, perineal and scrotal skin and bladder mucosa grafts. Success rate was 91% and 84% for anastomotic and substitution urethroplasty respectively. Success was defined as normal voiding pattern with no radiological evidence of recurrent stricture. Seven patients complained of erectile dysfunction. One patient developed partial incontinence, two patients got rectal injury and necrosis of skin flap occurred in one patient.

Conclusion: Anastomotic urethroplasty is treatment of choice for post traumatic bulbar strictures (≤ 1.5 cm) and posterior urethral strictures of any length. Substitution urethroplasty procedures selection depends on site and length of stricture.
CURRENT EFFICACY OF ANTIBIOTICS AGAINST KLEBSIELLA ISOLATES FROM URINES IN KARACHI’
Farhan E Abdullah, Ammara Mushtaq,
Dow Medical College, Dow University of Health Sciences

Objective: Due to emergence of bacterial resistant strains, the effectiveness of current antibiotic treatment without culture/sensitivity testing is questionable. Our study aims to assess the present sensitivity profiles of Klebsiella isolates from urine samples and provides options for empiric prescription.

Methods: Klebsiella pneumoniae isolates collected over 3 months till April 2010 from 256 urine samples suggestive of UTI were identified at a local diagnostic lab using standard protocol and API-20 Staph system, and subjected to Kirby-Bauer disk diffusion sensitivity testing. MICs were also estimated by E-nephelometry.

Result: Among 19 drugs used, high resistance was found to Amoxil (96.5%), Doxycycline (73.8%), Nalidixic acid (72.3%), Pipemidic acid (64.1%), Amoxiclav (62.1%), Gentamicin (61.3%) and Tobramycin (51.3%). Comparatively low resistance was found to the Quinolones Enoxacin (34.8%), Sparfloxacin (34.4%), Ciprofloxacin (34%), and Ofloxacin (34%), the 2nd generation Cephalosporin, Cefuroxime (32.4%), and the 3rd generation Cephalosporins, Cefixime (30.1%), Ceftriaxone (20.3%) and Ceftazidime (19.5%). Most effective was the Aminoglycoside, Amikacin (91.8%), followed by Fosfomycin (91.4%).

Conclusion: Self-medication, lack of awareness, and the misuse of antibiotics by doctors has exacerbated the menace of microbial resistance. The study warrants the prudent choice of drugs in adherence with prevailing sensitivity profiles.

PATTERN OF MALIGNANT RENAL TUMOURS ON RADICAL NEPHRECTOMY USING 2004 WHO CLASSIFICATION OF RENAL TUMOURS’
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AFIU Rawalpindi

Objective: To determine the type of malignant renal tumors subjected to radical nephrectomy at a tertiary care urology unit using the 2004 WHO Classification for renal tumors.

Methods: The study included 92 patients with malignant renal tumors of both gender and aged above 15 years. The histopathological types and grades were recorded along with the gross tumor presentation. The data was entered in structured proforma and analyzed for descriptive statistics using SPSS version 14.

Result: Over the span of 24 months study, 92 cases of malignant renal tumors were subjected to radical nephrectomy. The age was 16 – 82 years (57.23 ± 14.61) and male to female ratio was 2.1 : 1. The lesions were mostly unifocal (96.7%) and 58.6% affecting the right side. The commonest malignant renal tumor encountered was the conventional clear cell renal carcinoma (78.2%). The other tumors in descending order were the transitional cell carcinoma (7.6%), papillary (chromphilic) renal cell carcinoma (6.5%), renal cell carcinoma - unclassified (3.2%), chromphobe renal cell carcinoma (2.1%), Wilms’s tumor and oncocytoma (1.7%).

Conclusion: The commonest malignant renal tumor remains the conventional clear cell renal carcinoma, with predominance in males and on the right side. The multifocality and involvement of the whole kidney is a rare presentation.
COMPOSITIONAL ANALYSIS OF URINARY TRACT STONES OF PATIENTS VISITING IKD.
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Objective: About 1–15% of the World population is affected by renal stones. It is the third most common affliction of urinary tract exceeded only by urinary tract infections and pathologic conditions of prostate. Certain intrinsic and extrinsic factors may be linked in the genesis of urinary calculi. The main types of stones are made up of calcium oxalate, calcium phosphate, magnesium ammonium phosphate and uric acid. Knowledge of the chemical composition of urinary stones helps in understanding their etiology, proper management of the disease and the prevention of its recurrence. Different studies have been published regarding stone compositions from different parts of the country but no such reports are available from our province. Purpose of present study was to report our experience about stone composition in our area.

Method: This study was conducted at Institute of Kidney diseases, Peshawar from May 2009 to June 2010. The study population included patients diagnosed with renal stones. 54 patients were included in this study. Chemical analysis was performed on renal stones passed spontaneously, stone/fragment/gravel passed after ESWL or stone/fragments retrieved after open surgery or endourological procedure. Patients of any age and sex were included in this study while any patient who was not interested in stone analysis was excluded from the study. Results were reviewed and analyzed with the help of SPSS 11.

Results: Out of 54 patients, 37 were male and 17 were female. Pure calcium oxalate calculi were in 15 cases (27.8%). Pure uric acid calculi were in 2 cases (3.7%). Calcium oxalate mixed with uric acid was found in 23 cases (42.6%). 9 Patients were having Magnesium ammonium Phosphate stones (16.7%). Stones containing both Calcium Oxalate and Calcium Phosphate were present in 5 patients (9.2%). Cystine stone was not found in this study.

Conclusion: Calcium containing mixed stones is the commonest variety of renal calculi in patients of Khyber Pakhtunkhwa Province.

INNOVATIONS IN CONVENTIONAL URETERORENOSCOPY (URS)
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Department of Urology; Institute of Kidney Diseases Hayatabad Medical Complex Phase-4 Hayatabad Peshawar

Objective: To study the efficacy and safety of ureteroscope (URS) with pneumatic lithotripsy in pediatric bladder and adult renal stone disease.

Background: Stone formation in urinary tract is known to the history of mankind as the shadows of it can be cited in Hippocratic Oath. The treatment of stone disease has travelled for centuries from herbal remedies to the tremendous development in endo-urological equipments. Although semi rigid Ureterorenoscopy is an established modality for treatment of ureteral calculi, yet the use of URS with intracorporeal lithotripsy in pediatric bladder stone and limited role in renal stones is a matter of great debate in recent literature. The aim of our study is to share our initial experience in URS with pneumatic lithotripsy in pediatric bladder and adult renal stones.

Methods: It is a descriptive study that was conducted in department of Urology (Team ‘C’) at Institute of Kidney Diseases Hayatabad Peshawar from 1st January 2009 till date. Total numbers of 70 children with bladder stones and 15 adult patients with renal stones with were selected by non probability convenient sampling. Stones were fragmented by pneumatic lithotripsy. The fragments of pediatric bladder stones were removed by Elik evacuator through 13 Fr resectoscope sheath.

The stone fragments in renal pelvis of adult patients were removed through grasper and pig tail ureteral stents were inserted in the end for 6 weeks.
All the pre-operative, per-operative and postoperative data was recorded on structured Proforma and was analyzed on SPSS version 17.

Result: The mean age of pediatric patients was 6.5 years (Range 3-12 years). The mean bladder stone size was 12 mm (Range 8-20 mm). Pneumatic lithotripsy was successful in all the patients. Mean operative time was 27.3 min (Range 15-40 min) and the mean hospital stay was 1.2 days (Range 1-3 days). All the patients were completely stone free at 3rd Post operative day. Early complications were recorded in 9 patients (13%) that included mild hematuria in 6 patients and febrile UTI in 3 patients.

Regarding the 15 adult patients with renal pelvic stones, the mean age was 29.4 years. The mean stone size in renal pelvic stones was 24 mm (Range 18-32mm).

PERCUTANEOUS NEPHROLITHOTOMY (PCNL) FOR THE TREATMENT OF STAGHORN CALCULI
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Objective: To see the safety and efficacy of PCNL for the treatment of staghorn renal stone. The goal of stone treatment is to use less morbid, minimal invasive and effective modality. The surgical management of urinary calculus has evolved considerably over the past few decades especially with the introduction of minimal invasive procedures like percutaneous nephrolithotomy (PCNL), and has largely replaced open stone surgery for the treatment of staghorn renal stones.

Methods: We studied prospectively 52 patients who were treated with PCNL for staghorn renal stones at our institute from June 2007 to June 2010. There were total 52 renal units (34 male and 18 female). Mean age was 35.9 years (range 7-59 yrs). A partial staghorn was encountered in 29 (55.8%) kidney units while 23 (44.2%) stones were complete staghorn stones.

Result: The average procedure time was 105 minutes(range 75–180). The mean hospital stay was 3 days(range 2-7). The average stone size was 3.9 cm(range 3.1-5.8). A single tract was made in 45 patients(86.5%), while multiple tracts were used in 7 procedures(13.5%). In 41 patients(78.84%), complete stone clearance was achieved after a single session of PCNL. The procedure was staged in 4 patients and a repeat PCNL was performed. With dual therapy (PCNL + ESWL), stone clearance was achieved in 48 patients(92.3%). Complications encountered were bleeding, four patients, nephrectomy one patient, pneumothorax, one patient, urosepsis in one patient and adynamic ileus in two patients.

Conclusion: PCNL is safe and Effective treatment for staghorn renal calculi associated with less morbidity, shorter hospital stay and is cost effective.

ERECTILE DYSFUNCTION IN PAKISTAN: A LOST DOMAIN OF UROLOGIST
Liaquat Ali, Kifayat Tariq, Muhammad Shafzad, Nasir Oraizi,
Urology, Institute of Kidney Diseases Hayatabad Peshwar, Urology, Institute of Kidney Diseases Hayatabad Peshwar, Urology, Institute of Kidney Diseases Hayatabad Peshwar, Urology, Institute of Kidney Diseases Hayatabad Peshwar

Objective: Back Ground Sexual health and function are important determinants of quality of life.Erectile dysfunction (ED) is an extremely distressing and demoralizing disease of men and successful treatment of erectile dysfunction has been demonstrated to improve sexual intimacy and satisfaction, improve sexual aspects of quality of life, improve overall quality of life, and relieve symptoms of depression. The over all prevalence of ED varies from 30-50 % across the globe. As a matter of fact sex education in Pakistan is a social taboo, so majority of patients with sexual dysfunction are seen in clinics of quacks, Hakims, spiritual healers, dermatologist etc rather being referred
early to Urologists. More over due to unavailability of conventional remedies for treatment of ED, We have no other choice to prescribe herbal medicine/ phyto therapy even not knowing their efficacy and safety. Objective: To study the mode of referral of patients with erectile dysfunction and to compare the efficacy of different herbal medicines that are available in market for the management of ED.

Method: It is a comparative study which was conducted in Department of Urology, Institute of Kidney Diseases Hayatabad Peshawar and Saidu Teaching Hospital Swat from 1st March 2005 till 31st December 2010. Total numbers of 780 patients with sexual dysfunctions were included in the study by non probability convenient sampling. We used The International Index of Erectile Function (IIEF-5) scale for the presence and grade of ED. 780 patients were divided in to 5 groups of almost 150 each. Patients were prescribed 4 herbal products (Gonadil F (Getz pharma), Infertex (Romen Pharma), Sperma (Samgin Pharma Korea), Biogain (Romen Pharma) and 1 Zinc supplement Surbex Z (Abbot laboratories). All the data was recorded on structured Proforma and was analyzed on SPSS version 17.

Results: The mean age of patients was 27 years (16-68 years). The mean IIEF-5 score was 9.8 (Range 5-18) indicating moderate to severe ED in most of the cases. Unfortunately only 56 patients (7 %) had presented initially to Urologist, rest of all 724 patients were initially treated by Quacks, General Practitioners, Homeopaths, Spiritual healers, Dermatologists, Gynaecologists and Psychiatrists. The mean delay in presentation to an Urologist was 18 months (3- 24 months). Regarding the efficacy of herbal products in term of symptomatic improvement, their over all efficacies was in range of 28-35% with except one formulation which contained Korean Red Gin Sing with efficacy of 48 %. The mean improvement of all herbal formulation in IIEF -5 score of 9 (7-15) The efficacy of Zinc supplement alone as placebo was 15 % in selected group.

Conclusion: Erectile dysfunction is a global problem. There has been a tremendous ignorance in the public about proper referral and management of Sexual dysfunction. Herbal medications are marginally effective in management of erectile dysfunction

ROLE OF TOPICAL TRANEXAMIC ACID IN REDUCING POST TURP HEMATURIA

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Objective: To evaluate the role of topical application of tranexamic acid through irrigation fluid in reducing post TURP hematuria. Introduction: Transurethral resection of prostate (TURP) is considered to be the gold standard treatment of BPH. Bleeding after TURP is most common complication. To reduce post operative hematuria several different approaches have been tried. Tranexamic acid prevents bleeding by inhibiting TPA. Recent studies have proven the role of topical application of tranexamic acid in reducing the blood loss after orthopedic and dental surgeries. However role of topical application of tranexamic acid in decreasing hematuria after TURP through irrigation fluid has not been studied.Methods: Total seventy men who underwent TURP and met inclusion criteria were randomized to receive irrigation fluid with 500 mg tranexamic acid in one liter normal saline and placebo. Weight of resected prostate, intra-operative blood loss and blood loss on 1st and 2nd post operative day were measured and difference between two groups were calculated

Result: Both groups (which received tranexamic acid vs placebo) were comparable in terms of mean prostatic weight (58.84gm vs 56.15gm), mean resected prostate (31.92gm vs 32.30gm) and mean duration of resection(36.53 vs 31.46). Patients who received tranexamic acid in irrigation fluid had slightly decreased drop in mean hemoglobin levels (0.87gm on 1st P.O.D and 0.31gm on 2nd P.O.D) as compared to the patients who received placebo in irrigation fluid (0.98gm on 1st P.O.D and 0.95gm on 2nd P.O.D).

Conclusion: Topical tranexamic acid through irrigation fluid decreases blood loss after TURP.
PCNL FOR IMPACTED UPPER URETERIC CALCULI
Shaqtique-ur-Rehman Memon, Jai Pal Paryani, Mohammad Shahnaz Lazhari, Naveed Akbar,
Urology, LUMHS Jamshoro, Urology, LUMHS Jamshoro, Urology, LUMHS Jamshoro, Urology, LUMHS Jamshoro

Objective: Percutaneous Nephrolithotomy is becoming gold standard procedure for renal stones. Impacted upper ureteric calculi often pose a challenge as ESWL may not be successful because of edema and lithoclast also causes inadvertent pushback into the kidney. We present our experience of treating impacted upper ureteric calculi with PCNL.

Method: This was a retrospective chart review of those patients who presented with impacted upper ureteric calculi. All patients who had pre-operative UTI were treated with appropriate antibiotics. Before puncturing the kidney stones were pushed back into the kidney and 5 or 6 Fr ureteric catheter placed. Patient's demographic data, clinical presentation, radiological findings, operative findings and clearance were noted on a proforma. Data was analyzed on SPSS version 16.

Results: From January 2005 to January 2011 PCNL was performed on 101 patients with impacted upper ureteric stones. There were 70 males and 31 females with mean age of 26 years. The location of stone/s and function of the kidney was confirmed on IVU. Majority of patients had gross hydronephrosis with stone size ranging from 1.5 cm to 2.5 cm. At the end of the procedure 16Fr Nephrostomy or 6 Fr DJS placed for all patients which was removed after 3 and 14 days respectively. Post-op X-ray KUB was performed to confirm the clearance. All patients had complete clearance.

Conclusion: PCNL is safe, economical and effective procedure for treating impacted upper ureteric stones.

PREVALENCE OF HEPATITIS B AND C IN UROLOGICAL PATIENTS
Aijaz Ahmed Shaikh, Jai Pal Paryani, Shaqtique-ur-Rehman Memon,
Urology, LUMHS Jamshoro, Urology, LUMHS Jamshoro, Urology, LUMHS Jamshoro

Objective: Hepatitis B and C virus is a major health issue worldwide especially in developing and underdeveloped countries. World health organization (WHO) estimates that about 170 million people i.e.; 3% of world population are infected with HCV. Similarly HBV is another health problem with 350 million (6%) people being carrier worldwide. Data from Pakistan medical & research council shows that 7.4% Pakistani population is suffering from Hepatitis B and C of which 2.6% are infected with HBV and 4.8% with HCV. We are trying to know the spectrum of this disease in Urological patients.

Method: This was a retrospective study conducted at Department of Urology Liaquat university of Medical & Health Sciences Jamshoro from January 2010 to December 2010. Patients who underwent surgical procedures at Urology ward were included in the study. Data collected included including age, sex, history of previous procedures, trauma, blood transfusion, serology, coagulation profile and use of IV or IM medication in past.

Results: During study period 847 patients underwent surgical procedures at urology ward. All were screened for Hepatitis B and C. out of 847 patients males were 656 (77.5%) and females were 191(22.5%). Total of 72 (8.5%) were found to positive for Hepatitis B & C. Out of 72 patients 62 (86%) were positive for HCV and 10(14%) were positive for HBV. Most common age group affected from HBV and HCV were aged 42-65 years. Among affected patients 44 (61.1%) were males and 28 (38.8%) were females. Nearly 90% patients gave history of frequent use of parenteral medications at GP's clinic, followed by history of blood transfusion in 14 (19.4%) patients. Out of positive 72 patients 30 (41.1%) had a previous surgical procedure, 4 (5.5%) had history of RTA. Coagulation profile was deranged in 14 (19%) patients who were corrected before surgery.

Conclusion: this study indicates high prevalence of HCV than HBV seropositivity in urological patients. Screening for Hepatitis B and C should be declared mandatory before any surgical procedure. All preventive measures should be taken to stop spread of these viral infections in health care givers.
AWARENESS OF HEMATURIA AND ITS MANAGEMENT AMONG NON-UROLOGIST DOCTORS- A QUESTIONNAIRE BASED SURVEY.
Atif Javed, Abdul Jabbar Pirzada, Aziz Abdullah, Urology, Liaquat National Hospital, Urology, Liaquat National Hospital, Urology, Liaquat National Hospital

Objective: Introduction: Hematuria is the most common manifestation of various urologic disorders. Proper urologic evaluation is recommended for both microscopic and gross hematuria. A large number of patients present with complaint of hematuria to non-urologist doctors including General physicians, Family physicians, internal physicians and Gynaecologists. However awareness about hematuria among non-urologist doctors is still limited. This study is designed to evaluate the level of awareness about hematuria and its management among non-urologist doctors. Objective: To evaluate the level of awareness about hematuria and its management among non-urologist doctors and to prepare recommendations according to the results so that hematuria could be managed in a better way

Method: A questionnaire based survey was conducted. About one thousand non-urologist doctors including General physicians, Family physicians, internal physicians and Gynaecologists were visited and asked to answer the questions by encircling the appropriate options. 932 doctors filled the questionnaire. 52 doctors refused. 16 questionnaires were not included in the study because of improper answers

Results: Still being finalized

Conclusion: Awareness of hematuria and its management among non-urologist doctors is little and proper training programmers and workshops are needed to improve the awareness.

LASER URETHROTOMY OR OPTICAL INTERNAL URETHROTOMY VIA COLD KNIFE FOR URETHRAL STRICTURE. FINDING THE EDGE.
M Bilal Quddus, S Mamun Mahmud, Salman el Khalid, The kidney center, Karachi

Objective: to study the outcome of laser urethrotomy versus conventional optical internal urethrotomy (OIU) via cold knife & its impact on recurrence of urethral stricture disease.

Method: we retrospectively studied the data of our patients having stricture urethra, managed endoscopically from august 2008 to august 2010.

Results: total 152 patients underwent OIU. Among them laser was used in 84 & cold knife was used in 68 patients.

Conclusion: in our study we found that both modalities have comparable results & favorable outcome. However, prospective randomized study is required to see the impact on recurrence.

UROLOGICAL COMPLICATIONS AFTER RENAL TRANSPLANTATION
M. Younis, M. Nawaz Chughtai, M. Basit, Mayo Hospital Lahore

Objective: To document the development of surgical complication in our patients under going renal transplantation in the first three (3) months. To manage the post operative complication and their out comes

Methods: A total number of 100 patients of any age and sex under going live renal transplantation were included in the study.

Result: 100 renal transplants were done at our center during last 3 years. All were live related donors. Donors were mostly females while recipients were mostly females. Surgical Complication rate was 21%. These were Lymphatic
fistula in 04 pts; Wound infection in 05; Urinary leakage in 05; Ureteric obstruction in 03; and Gross hematuria was seen in 05 patients.

Conclusion: The overall incidence of technical complications is approximately 13% in our study. Through surgical complications accounts for 00% mortality in our series, meticulous attention to surgical technique can reliably guide the surgeon to address the technical challenges.

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**IMPROVISING OUR TECHNIQUE OF END TO END URETHROPLASTY.**

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Objective: Management of posterior urethral disruption due to pelvic trauma can be quite challenging and is the subject of ongoing controversy. This study presents an update of JPMC for management of these injuries by delayed end to end urethroplasty. We got published a series of such cases in the past but keeping in view the less than optimal results in that, we improvise our technique a little bit.

Methods: Since 2004 all patients undergoing posterior urethroplasty by single surgeon at JPMC selected retrospectively, descriptive statistics were calculated and recurrence was assessed. Success was defined as no or mild/moderate recurrence following definitive urethroplasty, managed successfully with single to thrice internal urethroplasty respectively.

Result: Total 32 patients included in the study. Mean age of patients was 35 years. In all patients, delayed end-to-end urethroplasty performed. These cases are under continuous follow-up. All patients had history of trauma, twenty two patients suffered road traffic accident and 10 patients had history of fall and other trauma to perineum or urethra.

Fifteen patients had associated pelvic fracture. One patient developed epididymo-orchitis postoperatively and managed conservatively. Three patients had erectile dysfunction and remained so postoperatively. One patient developed new erectile dysfunction after surgery. All patients remain continent after surgery.

Average interval between initial injury and urethroplasty was 05 months. Post operatively pericatheter urethrogram done after 03-04 weeks and Foley catheter removed. 15 patients 46.8% require no further treatment after catheter removal. 08 patients 25% needs single internal urethroplasty within 4-8 weeks of Foley catheter removal. 06 patients 18.7% need internal urethroplasty twice in 4-8 weeks of catheter removal. They were kept on clean intermittent self catheterization for few months. 03 patients 12.7% had frequent multiple internal urethroplasty considered as complete failure, and they were planned for redo urethroplasty.

Conclusion: Anastomotic urethroplasty offers good long term results to patients with posterior urethral trauma and stricture disease.

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**FIRST HPSE2 MISSENSE MUTATION IN UROFACIAL SYNDROME**

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WHY WE DID TRANURETHRAL RESECTION OF PROSTATE?

Jai Pal Paryani, Shafique-ur-Rehman Memon, Shoukat Ali Mughal,
Objective: Transurethral resection of prostate is one of the most commonly performed procedure by any Urologist. Recurrent urinary retention, recurrent urinary tract infections, obstructive uropathy, vesical stones and refractive hematuria are the absolute indications of TURP. We are looking into the indications of TURP at our centre.

Methods: This is a retrospective chart review of patients who underwent TURP at Department of Urology LUMHS Jamshoro from July 2007 to January 2011. Patients complete demographic data, clinical presentation with duration, DRE, radiological findings and indication of TURP were noted on proforma. Data was compiled and analyzed on SPSS version 16.

Result: Total of 299 patients underwent TURP in above mentioned period. Their mean age was 63.5 years. In 220 (75%) patients duration of lower urinary tract symptoms was more than 2 years. Average size of prostate gland was 41 gm. Bilateral hydroureteronephrosis was found in 30 (10%) patients.

Indications of TURP: Recurrent urinary retention in 120 (40%) patients, Bladder stone in 78 (26%) patients, obstructive uropathy in 30 (10%), Recurrent UTI's in 26 (9%) patients refractory hematuria in 6 (2%) patients and bothersome LUTS with failed medical therapy in 39 (13%) patients.

Conclusion: Majority of patients had longstanding LUTS. Bladder stone was found in more than one fourth patients who show high prevalence and chronicity of problem and negligence.

Awareness among public and general practitioner is recommended to avoid complicated BPH.