



# SCIENTIFIC PROGRAMME

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## BAUSCON2020

Day 1 | 11 January 2020, Saturday | Venue: Ruposhi Bangla Grand Ballroom, InterContinental Dhaka

Time		Day 1 : 11 January 2020
0755-0800		<b>Welcome Address</b>
0800-0840		<b>Session 1: Pediatric Urology</b>
	Chairpersons	<b>Shivam Priyadarshi, Sudip Das Gupta</b>
	Course Director	Master Class: Selection of procedure for hypospadias depending on tissue configuration <b>Anil Kumar Kantilal Takvani, India</b>
0840-0940		<b>Session 2: Society/ Association Lectures</b>
	Chairpersons	<b>Allen Wen-Hsiang CHIU, Harunur Rashid, Kazi Rafiqul Abedin</b>
	Session Coordinator	<b>Md. Fazal Naser</b>
		<b>Asian School of Urology (ASU)</b>
0840-0855		"Extended and expanded use of laparoscopic surgery for salvage situation after definitive therapy" <b>Shin Egawa, Japan</b>
		<b>Urological Society of India (USI)</b>
0855-0910		"Evolution of minimally-invasive PCNL as the standard of care in South Asia" <b>Madhu Sudan Agrawal, India</b>
		<b>Urological Association of Asia (UAA)</b>
0910-0925		Novel concepts on etiology and management of interstitial cystitis/ bladder pain syndrome. <b>Yao-Chi Chuang, Taiwan</b>
		<b>Soci�t� Internationale D'Urologie (SIU)</b>
0925-0940		The algorithm of urethral stricture management <b>Paksi Satyagraha, Indonesia</b>
0940-0955		<b>Session 3: Plenary</b>
	Chairpersons	<b>MA Wahab, Shin Egawa, Md. Shafiqul Alam Chowdhury (Shamim)</b>
	Session Coordinator	<b>Mohammed Mizanur Rahman (Sumon)</b>
		"Medical Education" <b>Allen Wen-Hsiang CHIU, Taiwan</b>
0955-1010		<b>Session 4: Andrology</b>
	Chairpersons	<b>AKM Anwarul Islam, ATM Mowladad Chowdhury</b>
		Evaluation and Management of Male Infertility <b>Shivam Priyadarshi, India</b>
1010-1110		<b>Session 5: Minimal Invasive</b>
	Chairpersons	<b>Ravindra Bhalchandra Sabnis, Md. Shahidul Alam Khan, Md. Mizanur Rahman</b>
	Session Coordinator	<b>Mohammad Salahuddin Faruque</b>
1010-1025		Minimal Invasive management of Hilar Tumour <b>Mallikarjuna Chiruvella, India</b>
1025-1040		Retroperitoneal vs Transperitoneal laparoscopic/robotic partial nephrectomy <b>Mutahar Ahmed, USA</b>

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1040-1055		Novel Technique and functional outcome of neobladder in laparoscopic radical cystectomy. <b>Taishi Matsuuera, Japan</b>
1055-1110		Minimal Invasive Management of PUJ Obstruction Basics and Beyond <b>Mallikarjuna Chiruvella, India</b>
1110-1140		<b>Session 6: Symposium</b>
		What went wrong in pediatric urological procedures <b>Anil Kumar Kantilal Takvani, India</b>
1140-1150		<b>Tea</b>
1150-1310		<b>Session 7: Prostate Cancer</b>
	Chairpersons	<b>MA Salam, Md. Golam Mowla Chowdhury, Yao-Chi Chuang</b>
	Session Coordinator	<b>Md. Faisal Islam</b>
1150-1205		Technique of TRUS Biopsy <b>Ravindra Bhalchandra Sabnis, India</b>
1205-1235		High risk prostate cancer: Is there a best treatment <b>Muhammad Saduz-zaman Choudhury, USA</b>
1235-1250		"Role of orchidectomy in prostate cancer in the current era" <b>Rajeev Thekumpadam Puthen Veetil, India</b>
1250-1310		Management of metastatic prostate cancer – 2020 update <b>Muhammad Saduz-zaman Choudhury, USA</b>
1310-1355		<b>Session 8: Renal Transplant</b>
	Chairpersons	<b>AKM Khurshidul Alam, Md. Habibur Rahman Dulal</b>
	Session Coordinator	<b>Sarforaj Ali Khan</b>
1310-1325		Overcoming the hurdles of cadaver transplant <b>Ravindra Bhalchandra Sabnis, India</b>
1325-1340		Donor Nephrectomy – Harvesting and perfusion <b>Tohid Mohammad Saiful Hossain, BD</b>
1340-1355		Surgical Complications in Renal Transplant : Prevention & Management <b>Md. Kamrul Islam, BD</b>
1400-1600		<b>Prayer, Lunch &amp; Inaugural Ceremony</b>
1600-1615		<b>Session 9: Prof. Idris Lasker Memorial Lecture</b>
	Chairpersons	<b>SAM Golam Kibria, CM Delwar Rana, AKM Zamanul Islam Bhuiyan</b>
		Journey with Prostate over Three Decades <b>Md. Afiquor Rahman, BD</b>
1615-1645		<b>Session 10: Bladder Cancer</b>
	Chairpersons	<b>S.M. Mahbub Alam, Md. Shahidul Islam</b>
1615-1630		NMIBC: Risk Stratified AUA Guideline Based Management <b>Muhammad Saduz-zaman Choudhury, USA</b>
1630-1645		Role and technique: Extended lymph nodes dissection during cystectomy for Bladder Cancer <b>Mutahar Ahmed, USA</b>

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Time		Day 1 : 11 January 2020
1645-1735		<b>Session 11: Video Presentation</b>
	Chairpersons	<b>Mutahar Ahmed, Md. Amanur Rasul</b>
	Session Coordinator	<b>Md. Abdur Rakib</b>
1645-1653		Pan urethral stricture repair Kulkarni technique <b><i>Paksi Satyagraha, Indonesia</i></b>
1653-1701		Posterior anastomosis for PFUI <b><i>Paksi Satyagraha, Indonesia</i></b>
1701-1709		Rt. Adrenalectomy Lap <b><i>Tohid Mohammad Saiful Hossain, BD</i></b>
1709-1717		Adrenal Myelolipoma <b><i>Mohammad Salahuddin Faruque, BD</i></b>
1717-1725		Laparoscopic VVF repair <b><i>Md. Fazal Naser, BD</i></b>
1725-1733		Radical Retropubic Prostatectomy: Perioperative Experiences of 17 Cases <b><i>Md. Towhid Belal, BD</i></b>
1645-1745		<b>Session 12: Oral Presentation   Room Pearl</b>
	Chairpersons	<b>Abul Kashem Sarker, Rajeev Thekumpadam Puthen Veetil, Md. Zohirul Islam Miah</b>
	Session Coordinator	<b>Md. Abul Hossain</b>
1645-1653		Ambiguous Genitalia: Grown-up as Female: Vaginoplasty is the Best Solution. Experience in 40 Cases <b><i>Md. Zahid H Bhuiyan, BD</i></b>
1653-1701		Surgical Management of Female Urethral Stricture: Initial Experience <b><i>Mir Ehteshamul Haque, BD</i></b>
1701-1709		Penectomy and Lymphadenectomy for Cancer Penis: Outcome and Complications <b><i>Nasir Uddin Kazal, BD</i></b>
1709-1717		Perineal anastomotic urethroplasty: A preliminary report <b><i>Tanvir Ahmed Chowdhury, BD</i></b>
1717-1725		Spontaneous rupture of renal tumours <b><i>Mohammad Mahfuzur Rahman Chowdhury, BD</i></b>
1725-1733		Comparative Study of Pneumatic Versus Holmium Laser Ureteroscopic Lithotripsy for Upper Ureteric Stones. <b><i>Harun-or-Rashid, BD</i></b>
1733-1741		Single-Stage Double-Face Buccal Mucosal Graft Urethroplasty for Near Obliterative Long Segment Anterior Urethral Stricture: Our Experience. <b><i>Ujjal Barua, BD</i></b>
1740-1755		<b>Tea</b>
1900		<b>Cultural Program &amp; Dinner</b>

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Day 2 | 12 January 2020, Sunday | Venue: Ruposhi Bangla Grand Ballroom, InterContinental Dhaka

Time		Day 2 : 12 January 2020
0800-0840		<b>Session 13: Andrology</b>
	Chairpersons	<b>Promode Ranjan Singh, Nitai Pada Biswas, Paksi Satyagraha</b>
	Course Director	Master Class on Sexual dysfunction <b>Shivam Priyadarshi, India</b>
0840-0920		<b>Session 14: Pediatric Urology</b>
	Chairpersons	<b>Isteaq Ahmed Shameem, Mrinal Kanti Roy, Momeen Abdul Khaleque</b>
		UTI & VUR – decoding – current concepts of investigations & management <b>Anil Kumar Kantilal Takvani, India</b>
0920-0935		<b>Session 15: Plenary</b>
	Chairpersons	<b>Muhammad Saduz-zaman Choudhury, MA Monaf, Mirza M Hasan</b>
		Artificial intelligence and Urology <b>Allen Wen-Hsiang CHIU, Taiwan</b>
0935-1005		<b>Session 16: Reconstructive Urology</b>
	Chairpersons	<b>Omar Faruque Yusuf, SM Shameem Waheed, Md. Nurul Hooda Lenin</b>
	Session Coordinator	<b>Uttam Karmaker</b>
0935-0950		Pitfalls in urethral stricture management <b>Paksi Satyagraha, Indonesia</b>
0950-1005		Current status of tissue engineering in the management of stricture urethra <b>Rajeev Thekumpadam Puthen Veetil, India</b>
1005-1025		<b>Session 17: Pediatric Urology</b>
	Chairpersons	<b>M. Fakhurul Islam, Md. Afiquor Rahman, AKM Shahadat Hossain</b>
		Antenatal HN –postnatal approach <b>Anil Kumar Kantilal Takvani, India</b>
1025-1030		<b>Tea</b>
1030-1045		<b>Session 18: Plenary</b>
	Chairpersons	<b>Md. Mostafizur Rahman, Kazi Mohammad Monowarul Karim</b>
		Effective Urology Training: Creating the Urologists of Tomorrow <b>Mubashir Shabil Billah, USA</b>
1045-1100		<b>Session 19: Major General K.M. Siraj Jinnat Memorial Lecture</b>
	Chairpersons	<b>Md. Ali Akbar, Md. Serajul Hoque</b>
		Urological Training Simulators made from simple materials: are these advantageous for residents and young urologist in our country? <b>Mohammad Habibur Rahman, BD</b>
1100-1200		<b>Session 20: SAARC Association of Urological Surgeons</b>
	Chairpersons	<b>Madhu Sudan Agrawal, Md. Abdul Awal, Md. Monowar-UI-Haque</b>
	Session Coordinator	<b>AKM Musa Bhuiyan</b>
1100-1115		BPH Surgery in Adverse Scenarios <b>Rajeev Thekumpadam Puthen Veetil, India</b>
1115-1130		Surgical management of renal stone in developing country <b>Kazi Rafiqul Abedin, BD</b>

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Time		Day 2 : 12 January 2020
1130-1145		Chronic prostatitis/ Chronic Pelvic Pain Syndrome - Optimizing the management <b>AKM Anwarul Islam, BD</b>
1145-1200		Minimally invasive percutaneous nephrolithotomy (PCNL) vs Retrograde intrarenal surgery(RIRS) for upper urinary stones: personal experience and literature review <b>Md. Shawkat Alam, BD</b>
1100-1215		<b>Session 21: Residents' Forum   Room Pearl</b>
	Chairpersons	<b>Tohid Mohammad Saiful Hossain, Md. Waliul Islam Maruf, Mubashir Shabil Billah</b>
1100-1106		Outcome of Posterior Urethral Valve Ablation in Bangabandhu Sheikh Mujib Medical University <b>Md. Shaleh Mahmud, BSMMU</b>
1106-1112		Self-Inflicted Urological Injury: Our Experience in a Tertiary-Level Center <b>Nahid Rahman Zico, DMC</b>
1112-1118		Experience of PCNL in SSMC <b>Rezwatul Haque Rabbani Sohan, SSMC</b>
1118-1124		Our Initial Experiences with Laparoscopic Urologic Surgery <b>Shahnaj Khondoker Nisha, CMC</b>
1124-1130		Renal Function after Nephron-sparing surgery versus radical nephrectomy for renal cell carcinoma : A Comparative Study <b>Md. Mominul Islam, BSMMU</b>
1130-1136		Outcome and Quality of life after OMG urethroplasty in Anterior Urethral Stricture <b>Md. Abdul Baten Joarder, NIKDU</b>
1136-1142		Outcome of Buccal Mucosal Graft Urethroplasty in Male Urethral Stricture Disease: A Single Center Experience <b>K. M. Arifur Rahman, DMC</b>
1142-1148		Outcome of renal transplantation in Bangabandhu Sheikh Mujib Medical University (BSMMU) <b>B. M. Saiduzzaman Sujon, BSMMU</b>
1148-1210		Effective Ureteroscopy: From A to Z Urology Residency Experience in America <b>Mubashir Shabil Billah, USA</b>
1215-1245		<b>Session 22: Urinary Incontinence</b>
	Chairpersons	<b>Anil Kumar Kantilal Takvani, Md. Kamrul Islam</b>
1215-1230		Strategy of treating female urinary incontinence <b>Yao-Chi Chuang, Taiwan</b>
1230-1245		Outcome of artificial urinary sphincter implantation for the treatment of urinary incontinence after radical prostatectomy <b>Sohtaro Kanayo, Japan</b>

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Time		Day 2: 12 January 2020
1245-1330		<b>Session 23: Kidney Cancer</b>
	Chairpersons	<b>Md. Jahangir Kabir, Sabbir Ahmed Khan, Md. Shafiqul Azam</b>
	Session Coordinator	<b>Abdul Matin Anamur Rashid Choudhury</b>
1245-1300		Small Renal Mass : Less is better? <b>Muhammad Saduz-zaman Choudhury, USA</b>
1300-1315		Management of small renal mass, new imaging study to identify benign renal mass <b>Mutahar Ahmed, USA</b>
1315-1330		Metastatic Renal cancer : Current Management <b>Muhammad Saduz-zaman Choudhury, USA</b>
1330-1415		<b>Prayer &amp; Lunch</b>
1430-1455		<b>Session 24: Interactive Case Discussion</b>
	Chairpersons	<b>Moudud Hossain Alamgir, Md. Shawkat Alam</b>
	Moderator	<b>Mubashir Shabil Billah, USA</b>
1455-1520		<b>Session 25: Penile Cancer</b>
	Chairpersons	<b>Mallikarjuna Chiruvella, Md. Shahidul Islam (Sugom)</b>
		Penile cancer review <b>Muhammad Saduz-zaman Choudhury, USA</b>
1520-1530		<b>Tea</b>
1530-1610		<b>Session 26: Testis Cancer</b>
	Chairpersons	<b>Mohammad Shafiqur Rahman, Prodyut Kumar Saha, Sharif Shahjamal</b>
1530-1550		Seminoma : Treatment- Stage by stage. <b>Muhammad Saduz-zaman Choudhury, USA</b>
1550-1610		Stage 1 Non- Seminoma : Treatment options. <b>Muhammad Saduz-zaman Choudhury, USA</b>
1610-		<b>Closing Ceremony</b>

**e-Poster Presentations**

Liver Injury During Supine Percutaneous Nephrolithotomy (PCNL)

**Mambu T, K.M. Patel, M Ali, D Swallow**

Penile Injuries: 8 Years Management Experience In a Teaching Hospital

**Nasir uddin Kazal , Masum Hasan, Saroar Hossin, Fahmida Bayes Kakan, Shuvo Roy**

Outcome of open pyeloplasty on ipsilateral renal function in children

**Narayan Dulal, ASM Shafiqul Azam, Isteaq Ahmed Shameem**

Bilateral giant angiomyolipoma in a patient - a case of tuberous sclerosis complex

**M. M. Hasnat Parvez, Md. Amanur Rasul, AKM Shahadat Hossain,**

**Mohammad Mahfuzur Rahman Chowdhury, Hafiz Al-Asad**

Correlation between PSA density and Gleason score in prostate cancer patients

**Md. Naved Yusuf, Dhananjay Dey Biplab, Sudip Das Gupta**

**SCIENTIFIC PROGRAMME****BAUSCON2020****e-Poster Presentations**

“Comparison of Outcome of Ureteric Catheter and DJ Stent after URS ICPL of Lower Ureteric Stones”

***Ashraf Rahman, Nandan Kishur Kar, Sudip Das Gupta***

Postnatal approach of Antenatal hydronephrosis: Case Report

***Prince Bhandari, Isteaq Ahmed Shameem***

**Live Operative Workshop**

**13 January 2020 | Venue: National Institute of Kidney Diseases & Urology, Dhaka**

<b>Time</b>		<b>Live Operative Workshop on Laparoscopy</b>
0800-1600	Faculties	<b><i>Mallikarjuna Chiruvella, India</i></b> <b><i>Mutahar Ahmed, USA</i></b>



## Abstracts

### JOURNEY WITH PROSTATE OVER THREE DECADES

**Afiquor Rahman**

*Principal and Head of Urology, Add-din Women's Medical College, Dhaka*

I was destined to be an urologist. I became a doctor not by chance but by choice; I became a surgeon not by chance but by choice. I was admitted into MBBS course to fulfill my dream and satisfy my parent's desire and became a doctor in 1980. I qualified FCPS in general surgery in 1987, my dissertation was 'Comparative study of transvesical and retropubic prostatectomy'. I had the dream of becoming an urologist since my late medical life when my father faced the ordeal of prostate enlargement having no remedy in the early 1980s. He had to bear the burden of urethral catheter at a stress for long six months as the only urologist known to me (Prof. Siraj Zinnat) was away from the country at that time. I could not sleep and slumber during that time. My father's agony was relieved to a great extent when he underwent retropubic prostatectomy in CMH Dhaka 1982. He survived for next 8 years. This incidence galvanized me to further proceed with my career as an urologist and I had been looking for the opportunity. I always had the desire to work in the field of urology at every level. In May 1989, I found my expatriate colleague from Malaysia, Prof. Muskey, WHO consultant of family planning in Bangladesh working at Jashore and both dug out a cystoscope left in the storeroom of Jashore General Hospital for a long time and used it for a number of urological diagnostic procedures, my first experience of cystoscopy. I was looking for an opportunity for higher studies in urology in my country. In 1997, the moment came and I got the chance in the Master of Urology course at the then IPGMR (presently BSMMU). My thesis was on 'The prevalence of enlarged prostate in above 50 males among the people of a rural community'. We had no idea about the extent of enlarged prostate in our country. We found the prevalence of benign enlarged prostate as much as 39.5% among the male population above 50 years of age. During the MS course 1997 to 2000, I continued to learn TURP on my own at my private clinic at Kakrail Dhaka, (Kakrail Surgical Care).

I am very much grateful to Prof. M A Salam who first showed me the verumontenum in a private hospital in

Dhaka in 1998. It gave me a great confidence to be skilled in TURP. I am very much grateful to Prof. Khademul Islam who allowed me to do TURP in SSMCH with the help of my own instruments, where there was no urology unit and no technical logistics.

In 2008, I left the government service and joined a private hospital (Ad-din Women's Medical College Hospital-AWMCH). This hospital is a well-known hospital for providing quality and standard treatment with very low cost. Ad-din Hospital has opened a new horizon for me to work with huge number of urological cases. This hospital has given me a great opportunity to face various types of urological problems of both genders. I also take care of urological cases of other hospitals of Ad-din foundation. I am extremely grateful to Dr. Sheikh Mohiuddin, Executive Director of Ad-din Foundation for having confidence on me. I started the service of prostate care at AWMCH from the very beginning. For the last 5 years, a month-long (in February) free prostate care services have been introduced and this service has created a great awareness among the deprived and less privileged elderly group of population. During this period, we have operated (TURP) 1000 patients with enlarged prostate in our free camps. I have done around 5000 prostate surgery, mainly TURP in my 30 years' service.

My experience during this period is, a large number of elderly people suffer from voiding problem due to enlarged prostate which can be treated successfully before development of complications, any size prostate can be resected and a significant number of patients suffer from cancer which needs screening for early detection and proper management.

### LAPAROSCOPIC ADRENALECTOMY (RT) FOR ASYMPTOMATIC PHEOCHROMOCYTOMA

**Tohid Md Saiful Hossain Dipu, Narayan Dulal, Omar Faruk, Sumon Kumar Sen**

*Dept of Urology, BSMMU, Dhaka*

Md Lutfar Rahman 32 years old presented with LUTS and was incidentally diagnosed as right adrenal mixed echogenic mass (5×4cm) by USG of KUB region.

He was normotensive and has no symptoms and signs of adrenal hormonal imbalance.

CT scan showed mild contrast enhancing soft tissue mass of 5×4 cm arising from right adrenal gland.

CT guided FNAC : Pheochromocytoma.

All metabolic & biochemical evaluation was with in normal range.

After hospital admission we closely monitored his BP for 7 days and there was no fluctuation of BP.

After taking consultation from anaesthesia and endocrinology dept proper counselling was done.

Routine perioperative precaution for Pheochromocytoma was taken.

laparoscopic right adrenalectomy was done on 14/10/19 led by Assoc. Professor Tohid Md Saiful Hossain Dipu.

Perioperative period was uneventfull.

Discharged on 7<sup>Th</sup> POD and histopathology report revealed Pheochromocytoma (6×5 cm) .

## LAPAROSCOPIS VVF REPAIR.

**Fazal Naser**

**Introduction:** The urinary tract is at risk of injury during pelvic operations and complicated labour that may lead to urogenital fistula. There are multiple approaches to manage UGF ranging from conservative management to open surgical repair. Laparoscopy has also been evolved to be an efficient surgical modality.

**Objective:** To report our experience of laparoscopic repair of VVF with emphasis on the essential steps in ACKU and Shaheed Suhrawardy Medical College Hospital.

**Methods:** *Operative procedure:* All patients were subjected to general anesthesia. Preoperative cystoscopic evaluation was done in all cases with placement of ureteric catheter through the VVF into the vagina. Ureteric catheters in ureters were considered in some cases. A Foley catheter was kept in the bladder. Patients were then placed in a steep Trendelenburg position.

Laparoscopic ports - umbilical or supra-umbilical camera port (10 mm), a 10 mm working port on the right side and a 5 mm port on the left side - were placed in a fan-shaped manner. After creating pneumoperitoneum, the

intestinal adhesions were dealt with if any. The bladder was opened by a transverse cystotomy above the fistulous site. The fistulous opening and both the ureteric orifices were identified within the bladder. The fistula was circumscribed with a 0.5 cm rim of healthy bladder tissue and cystotomy incision was made continuous with the fistulous opening. Anterior vaginal wall was dissected off the bladder wall. Bladder closure was done in a single layer with 2-0 Vicryl suture in a continuous fashion. Vaginal side of the fistulous opening was closed with 2-0 vicryl continuous sutures. Omentum was used as an interposition tissue in between the bladder and vaginal wall.

### Result:

Characteristics	Observation (n=16)
Mean age (years)	29.6 (17-52)
Etiology	
Obstetric injury	07
Post LUCS	05
Post TAH/VH	04
Mean fistula size (mm)	11 (05-20)
Mean operative time (min)	122 (95-160)
Mean blood loss (ml)	91 (70-125)
Mean duration of hospital stay (days)	06 (04-09)

**Conclusion:** Laparoscopic VVF repair is a safe and viable approach.

## RADICAL RETROPUBIC PROSTATECTOMY: PERIOPERATIVE EXPERIENCES OF 17 CASES.

**Md. Towhid Belal, Md. Shafiquil Alam Chowdhury, Uttam Karmaker, Ripon Debnath**

*Dhaka Medical College Hospital*

**Introduction and objective:** Radical prostatectomy is the standard treatment for clinically organ confined prostate cancer. The major challenge of this surgery is to achieve negative surgical margins as well as preservation of continence and erectile function. Retrospectively we assessed the perioperative experiences and morbidity with oncological and functional outcomes of radical retropubic prostatectomy.

**Methods:** Total 17 cases underwent open radical retropubic prostatectomy from January 2016 to July 2019. Out of them 2 cases were started laparoscopically and ultimately converted to open procedure. All patients had clinically localized prostatic adenocarcinoma. The procedure was done through a lower midline incision with bilateral limited pelvic lymph node dissection. We assessed the patients perioperatively by the parameters including age, clinical stage, PSA level and Gleason score with diagnostic approach; preoperatively by operating time, blood transfusion and complications and postoperatively by complications with oncological and functional outcomes.

**Results:** The median age (range) was 63 (56-72) years. The median Gleason sum (range) was 7 (6-9) and mean pretreatment PSA was  $16.2 \pm 5.4$  ng/ml. There was no mortality and no major complication in perioperative period. Two (11.7%) patients had positive surgical margins. Four (23.5%) patients were continent at catheter removal, 8 (47.05%) at 3 months and 5 (29.4%) at 6 months. Nine (52.9%) patients had satisfactory erection at 6 months and 5 (29.4%) had at 9 months and 3 (17.6%) had no satisfactory erection beyond 1 year.

**Conclusion:** Due to difficult access to the surgical field open radical retropubic prostatectomy is a challenging procedure. The skill of the surgical team is the key element for optimum oncological and functional outcome.

**Key words:** Radical retropubic prostatectomy, perioperative experiences, retrospective.

## AMBIGUOUS GENITALIA : GROWN-UP AS FEMALE VAGINOPLASTY IS THE BEST SOLUTION. EXPERIENCE IN 40 CASES

Zahid H Bhuiyan,

*Professor, Department of Urology. Bangladesh Medical College, Dhaka*

**Introduction :** A neovagina may need to be created in case of congenital Ambiguous genitalia, absence of vagina, following radical surgery for pelvic tumor. Isolated congenital vaginal absence may be seen in MRKH syndrome, androgen insensitivity syndrome(AIS), congenital adrenal hyperplasia(CAH) often presents in adolescence when the girl fails to menstruate. Ambiguous genitalia may readily be diagnosed after birth

in case of cloacal exstrophy, bladder exstrophy, microphallus and penile agenesis.

**Method :** This is a prospective study, done in the department of Urology, Bangladesh Medical College Dhaka. The study period is from June'06 to sept'19. The sample size was  $n = 40$ . All patients were known to their parents and also to themselves as female and were presented with primary amenorrhoea except  $n = 01$  who presented at the age of 07 years for screening. Her 03 other elder sisters have similar problem and was operated. Another patient had primary amenorrhoea with cyclical lower abdominal pain due to haematometra. She was 46XX with vaginal agenesis. Among rest  $n = 38$ ,  $n = 08$  has 46XX/XY mosaics,  $n = 12$  has 46XX,  $n = 18$  is 46XY karyotype.

In  $n = 22$  cases ( $n = 14$ , 46XX,  $n = 8$  46XX/XY mosaics) have intra-abdominal gonads. Rest  $n = 18$ , (46XY);  $n = 08$  had intra-abdominal gonads,  $n = 10$  had inguinal gonads.

The external genitalia of all looks as female. The secondary sexual characteristics of all as female. Among all patients only two has got married and was divorced. Except  $n = 1$  case of hematometra. Other had no uterus. In  $n = 05$  cases are failed vaginoplasties, where it was done by split / full thickness skin graft around a mould. Sigmoid colovaginoplasty was planned in all cases. Excision of gonads were done in  $n = 18$  cases of 46XY followed by hormone replacement therapy.

**Results :** Post-operative recovery was uneventful in all the cases. Maintenance of personal hygiene and regular douching of neovagina with normal saline was instructed in all the patients for 06 weeks. All the patients were followed carefully monthly for 03 months. Then at 6<sup>th</sup> month and at 01 year. The patient had uterus, noticed menstruation at the end of third postoperative week. The over all patient satisfaction is excellent. We counsel all the patients about their future prospects, before and after operation. We also advice to bring their proposed husband to us for special counseling to make them aware regarding vaginal penetration and intercourse. Among  $n = 40$  cases,  $n = 26$  has got married. The patient has got uterus become mother 02 year after marriage by elective caesarian section.

**Discussion :** Vaginal construction has various indications and presents in different ages. Reconstructive surgery and gender assignment should be performed in earlier age for the psychological well being of the parents and the child. Many methods of vaginal construction have

been described. Frank technique of serial vaginal dilatation may be successful in case highly motivated strictly compliant patient in presence of rudimentary vagina. Traditionally the most common method of vaginal construction includes use of partial or full thickness skin graft around a mould. Isolated bowel vaginoplasty is now a common practice that can be done in any age. It is useful technique even in scared pelvis following previous surgery or radiation therapy. Ileal segment is the ideal for children for its small caliber while the mobility and size of sigmoid colon and cecum make it appropriate for older children and adolescents. High rate of shortening, dyspareunia, stenosis even obliteration may follow the use of split or full thickness skin graft vaginoplasties. Intestinal vaginoplasty creates an esthetically pleasing vagina. It can be done in any age specially in children who are not compliant to do regular home dilatation. Intestinal segment provide self lubricating neovagina. Problem of mucous production is less when sigmoid is used. Regular douche with normal saline can eliminate the problem.

**Conclusion :** Isolated bowel vaginoplasty provides an ideal substitute for vaginal construction can be done in any age. It provides self lubrication with excellent external cosmesis. Reconstruction in earlier age will provide natural gender identity in adolescence. Frank principle of serial dilatation is only indicated in adolescent in presence of rudimentary vagina, among the highly motivated and compliant patients. Skin graft vaginoplasty has got lot of disadvantages usually done in adolescence because stenting or dilatation has to be continued till coitus begins.

## **SURGICAL MANAGEMENT OF FEMALE URETHRAL STRICTURE: INITIAL EXPERIENCE**

**Haque ME; Hossain MS; Maoya MM; Yesmin N; Majumder A; Ishraque H; Mahmud M; Hasan MZ**

*Apollo Hospitals Dhaka, Bangladesh*

**Introduction :** Female urethral strictures are rare but can cause severe symptoms impacting the patient's quality of life. About 10% of women with obstructive voiding will have a true ("anatomical") urethral stricture. Most of the case were managed by urethral dilatation. There are many surgical techniques including use of various grafts and flaps have been described.

**Methods:** Female patients with obstructive voiding symptoms attending urology department first evaluated with history, physical examination and investigations to confirm stricture urethra. 9 consecutive patients with urethral stricture managed with ventral inlay labium minus graft urethroplasty (VILGU) by single surgeon in different private hospitals from 2015 to 2019.

**Result:** Mean operating time was 72 minutes and mean follow-up period 12.6 months. Mean Qmax increased from 3.6 to 24.8 ml/sec. Significant pervaginal hemorrhage observed in one patient and reinsertion of urethral catheter required in one patient. All patients were happy with significant improvement of urinary flow and symptoms

**Conclusion:** Despite some technical difficulties Ventral Inlay labium Minus Graft urethroplasty (VILGU) is a safe and effective technique in management of female urethral stricture

## **PENECTOMY AND LYMPHADENECTOMY FOR CANCER PENIS: OUTCOME AND COMPLICATIONS**

**Nasir Uddin Kazal, Masum Hasan, Saroar Hossain, Fahmida Bayes Kakan, Shuvo Roy**

*Cumilla Medical College*

**Introduction and objectives:** Surgery is the most common treatment options for all stage of cancer penis. Organ preserving surgery and total penectomy are most effective treatment form depending on staging. Lymphadenectomy required when cancer spread to draining lymphnode.

**Objectives:** To findout onchological outcome and complications following penectomy and lymphadenectomy.

**Methodology:** 27 patients enrolled from January 2009 – October 2019, in this retrospective study at Cumilla Medical College and private clinics. All patients underwent penile sparing surgery or total penectomy depending on local extension of cancer. Lymphadenectomy done when inguinal lymphadenopathy not improved after 6 weeks of antibiotic therapy and FNAC proved metastasis. 23 patients underwent ( 85.18%) total and 4 patients (14.81%) organ sparing surgery. 19 patients (70.37%) had inguinal

node metastasis and 3 patients (11.11%) had both inguinal and pelvic lymphadenopathy. 18 patients (81.81%) among 22 with inguinal node metastasis, underwent block dissection and rest 4 patients (14.81%) refused dissection. 3 patients advised for pelvic lymphnode dissection at separate surgery as they have more than 2 node metastasis, positive on inguinal node dissection but patients refused and send for medical oncological consultation. Follow up period was 5 months to 9 years.

**Results:** 27 patients with age range 38 -77 years mean 5 years, from January 2009 – October 2019 were reviewed. 13 patients (48.14%) were recurrence free. 9 patients (33.33%) had recurrence after 3 years of follow-up, among them 2 patients had penile preserving surgery and 7 had total penectomy. 5 patients lost from follow up. 4 patients (18.18%) developed leg oedema, 1 (4.5%) developed skin necrosis and wound infection in 2 patients.

**Conclusion:** Penile preserving surgery or total penectomy with lymphnode block dissection provide satisfactory results with few manageable complications.

**Key words:** Carcinoma penis, penile preserving surgery, total penectomy, Lymphadenectomy.

## PERINEAL ANASTOMOTIC URETHROPLASTY: A PRELIMINARY REPORT

Tanvir Ahmed Chowdhury, Md. Mizanur Rahman, Humayun Kabir Bhuiyan

*Dhaka Medical College Hospital*

**Introduction and objective:** Perineal anastomotic urethroplasty is the standard procedure of treatment of PFUDD. The major challenges of this surgery is to achieve a tension free, wide anastomosis which ensures free flow of perurethral urination and maintenance of impotence. Prospectively we assessed the perioperative and postoperative outcome of perineal anastomotic urethroplasty of PFUDD.

**Methods:** Total 61 cases of PFUDD were underwent perineal anastomotic urethroplasty from July 2017 to June 2019 in various centres of Dhaka of city including Dhaka Medical College Hospital. Preoperatively voiding cystourethrogram and retrograde urethrogram was done to evaluate the stricture and bladder neck. Midline perineal incision was made and bulboprostatic, end to

end, water tight anastomosis was done over a stent (catheter). Adequate excision of all scar tissue, urethral spatulation was done before anastomosis. We assessed all patients postoperatively. Pericatheter urethrogram was done on 28<sup>th</sup> postoperative day and urethral catheter was removed after that. Postoperative followup consisted of symptomatic assessment, uroflowmetry, voiding cystourethrogram with retrograde urethrogram and urethroscopic examination.

**Result:** Mean patient age was 32 (6 to 45) years. The estimated preoperative length of distraction defect was 4.1 (0.5 to 7.5) cm. Mean period between original trauma and definitive repair was 12.1 ± 1 months. Duration of urethral stenting (catheter) was 4.3 weeks.

Wide anastomosis with free flow of urination was achieved in 55 (90%) patients. Incontinence developed in 3 (5%) patients. Fifteen patients were impotent before surgery due to injury and 9 (14%) patients developed impotence after surgery. There is no complications related to pubic resection, bowel herniation or periurethral cavity recurrence.

**Key word:** PFUDD, Anastomotic urethroplasty, Prospective study.

## SPONTANEOUS RUPTURE OF RENAL TUMORS- OUR OBSERVATION OF THREE CASES.

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Spontaneous rupture of the renal parenchyma is a rare phenomenon, usually seen as a complication of an existent underlying disease. The most common causes of spontaneous renal hemorrhage are benign and malignant tumors of the kidney among which angiomyolipoma and the renal cell carcinoma are the most common types. As well as tumors, among the causes of spontaneous renal rupture associated with bleeding, there are vascular anomalies affecting the parenchyma, infectious causes and coagulation disorders. In our case series, we aimed to discuss the presentation and management of three cases of spontaneous rupture of renal tumor. For the last one

year we treated 3 patients (2 males and 1 female) with spontaneous subcapsular or intraperitoneal haemorrhage resultant from renal tumor rupture. Morphologically, 2 tumors were renal angiomyolipoma and 1 tumor was renal cell carcinoma. Most characteristic symptoms consisted in loin pain and lump on the affected side and presence of gross hematuria in all the patients. Marked hemodynamic disorders of hypovolumic type were observed in 66% patients and needed blood transfusion for resuscitation. Left kidney tumor ruptures were more frequent (66%). Preoperative diagnosis was made with application of ultrasonography and computed tomography. One female patient was presented with bilateral angiomyolipoma but symptomatic on right side. All patients needed nephrectomy but two patients needed emergency nephrectomy. Thus, patients with spontaneous rupture of renal tumors are characterized by loin pain, lump and gross haematuria, prevalent location of the tumor on the left side, high diagnostic effectiveness of ultrasonography and computed tomography.

### COMPARATIVE STUDY OF PNEUMATIC VERSUS HOLMIUM LASER URETEROSCOPIC LITHOTRIPSY FOR UPPER URETERIC STONES

Rashid HO, Islam S ,Waheed S M Shameem, Rakib A, Alam M, Rahman A .

**Objective:** To compare the outcomes of ureteroscopic lithotripsy with pneumatic lithotripter versus Holmium:Yttrium-Aluminum-Garnet (Ho:YAG) laser in the management of upper ureteric stones.

**Materials and methods:** Patients who underwent ureteroscopic lithotripsy with pneumatic lithotripter or Ho:YAG laser for upper ureteric stones were retrospectively reviewed. Patients with urinary tract infection, loss of follow-up, concurrent middle or lower third ureteral stones or acute renal failure were excluded. Patient age, stone size and burden (based on KUB or computerized tomography), stone upward migration, double J stent insertion rate, stone free rate and secondary intervention rate for residual stones were compared in both groups.

**Results:** There were 70 patients with upper ureteric stones (35 in pneumatic lithotripsy group and 35 in Ho:YAG laser lithotripsy group) meeting the study

criteria. Patients' age, gender, stone laterality, stone size and burden were similar in both groups. The Ho:YAG laser lithotripsy group had better stone free rate, less double J stent insertion rate and less secondary intervention rate, ureteric injury rate as compared with pneumatic lithotripsy (85.7% vs. 57.1%; 71.4% vs. 91.4%; 14% vs. 42.8% ; 5.7% vs 2.8% respectively, all  $p < 0.05$ ). In patients with stones larger than 10 mm, Ho:YAG laser lithotripsy had significantly lower upward migration rate, lower double J stent insertion rate, higher stone free rate and less secondary intervention rate.

**Conclusions:** Ho:YAG laser lithotripsy is better and much effective than pneumatic lithotripsy in the management of upper ureteric stones in terms of, stone free rate and secondary intervention rate for stones of all sizes. For stones larger than 10 mm, laser lithotripsy results in less stone upward migration.

### SINGLE-STAGE DOUBLE-FACE BUCCAL MUCOSAL GRAFT URETHROPLASTY FOR NEAR OBLITERATIVE LONG SEGMENT ANTERIOR URETHRAL STRICTURE : OUR EXPERIENCE

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**Introduction and objective :** To investigate the outcome of single-stage double-face buccal mucosal graft urethroplasty for near obliterative long segment anterior urethral stricture.

**Methods :** Among 46 different urethroplasties performed for long segment anterior urethral stricture at two tertiary urethroplasty centers in Chattogram, Bangladesh from January 2017 to December 2018, fourteen cases (30%)

underwent single-stage urethral reconstruction using double face buccal mucosa graft with near obliterative stricture. All patients underwent a combined approach using a dorsal onlay and ventral inlay BMG to create a 26-30 Fr. neourethra over a 14-Fr Foley catheter. Success was defined as no requirement for additional urethral instrumentation. Demographic and perioperative data was tabulated and outcomes were analysed. The follow-up period ranged from 12 to 24 months.

**Results :** Stricture location was bulbar (50%), penile (21%), or both bulbar and penile (29%). The patients ranged in age from 17 to 45 years (mean, 32.3±9.59 years) and stricture length ranged from 2.5 to 10 cm (mean, 5.8±2.78cm). Ventral inlay grafts, applied only within the near obliterating segment, measured a mean 42% of the opposing dorsal graft length. At a mean follow-up of 15.7 months, 12 of the 14 cases were successful (86%). Among the two failed cases, one underwent DVIU and other needs excision and anastomosis. Every patient was contacted and assessed at the time of manuscript preparation. All patients are currently free of obstructive symptoms attributed to stricture disease with a mean follow-up of 15.7 months (range, 12-24 months).

**Conclusion:** Single-stage reconstruction of near obliterative long segment anterior urethral stricture using double-face buccal mucosal graft is safe and effective.

**Keywords :** urethra, urethral stricture, buccal mucosa, near obliterative.

## UROLOGICAL TRAINING SIMULATORS MADE FROM SIMPLE MATERIALS: ARE THESE ADVANTAGEOUS FOR RESIDENTS AND YOUNG UROLOGIST IN OUR COUNTRY?

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**Background:** In medical science specially in surgery Halsteadian principle, which includes “see one, do one, teach one” has shifted to the paradigm of “See several, simulate many, do one perfectly”. Repeated practice in simulators has a great role to be familiar with the procedures before going to practice in practical field. In Bangladesh access to a simulator system is difficult due to less accessibility and availability. Though Bangladesh is a developing country and unable to spend more money for simulator based educational system homemade simulators.

**Objective:** To evaluate feasibility and appropriateness of homemade simulations in urological training system.

**Method:** This observational study was conducted in the Department of Urology, NIKDU and in a private hospital from February 2019 to October 2019. Sample was collected by purposively from Urology residents and young urologist of NIKDU. Total participants were twenty six (26). Urology residents and young urologists who were interested to take part in simulation training and survey are included in this study. A questionnaire was prepared. A good number of residents and young urologists were present in the study. All of them performed procedures in TURP simulator, URS simulator, PCNL simulator and laparoscopy simulator. The questionnaire was supplied to the residents and young urologists after the procedures. All papers were collected and results were calculated.

**Results:** During the study out of 26 participants, 20 (76.9%) participants expressed no incorporated simulation training program in residency curriculum and 23 (88.4%) participants have no access to a simulation education centre. 20 (76.92%) participants think that there is a role for a standardized simulator training curriculum during your residency period. 25(96%) participants agreed that simulators would improve operating room performance. 16 (61.5%) participants think cost is a limiting factors and 10(38.46%)

participants didn't agree that cost is a limiting factor. 19 (73.08%) participants think that simulation practice can reduce patients risk & complications during surgery while 7 (26.92%) think not like that. 18 (69.23%) participants think the necessity to improve the quality of these homemade simulators to further improve the quality of simulator training program, while 8 participants think these simulators are sufficient for training. 92.31% participants believe it is necessary to include the simulation training program in urology residency. Most of the participants (96.15%) think that these cost effective homemade simulators are helpful in improving surgical skills.

**Conclusion:** In the early period of one's urological career, simulators would help shorten the learning curve by enabling repetitions and revisions. Homemade simulators could be a solution to meet the current needs in the field of urology in our country.

### Introduction

From the first day of mankind everybody learns from their environment. When they see anything they recall and reproduce it. By repeated practice men acquire skill in particular field. In medical science there is a popular principle named Halsteadian principle, which includes "see one, do one, teach one" (Abhishek 2018). This method produced many highly skilled surgeons for generations in the surgical field. But due to increased awareness for patient safety in recent years this model is not acceptable for trainees to obtain competency in a certain level (Abdul et al. 2016). So, a modern appropriate alternative was needed to overcome it. As a result Simulation-based training is taking an increasingly important place in surgical training and is becoming mandatory in many countries (Fiard, Descotes & Troccaz 2019). Because skills and dexterity can be improved by using simulators (Khine et al. 2011).

Urology is the forerunner of minimally invasive surgery. The procedures of urology produce additional learning challenges and possess a steep initial learning curve. Training process and assessment methods in urology are known to lack clear structure and often rely on differing operative flow experienced by individuals and institutions (Oliver et al. 2016). Usually the residents and young urologist do not have access to more sophisticated and expensive training systems. Developing and practicing basic surgical skills via the apprenticeship model of training and their assessment are no longer considered appropriate in the operating room. This fact, in conjunction with the long learning

curve of the urological procedures and issues of patient safety make the practice on urological simulators necessary before the first steps in urological procedures. So, the residents and the young urologists are encouraged to practice in urological techniques on simulators (Sidiropoulos et al. 2011).

Barriers to Surgical Simulation are small market, few simulators validated for teaching, high cost of software design, high cost of simulators at centres, selecting and retaining suitable faculty (Wignall et al. 2008).

In urology training program of USA 68% institutes have simulation education centres (Laguna et al. 2011). In the west, training of complex endourological procedures and laparoscopy is on models, with mentors, and on simulators. Training in the developing countries in these areas is still in the operating room on real patients (Rassweiler et al. 2007).

In the field of urology, the greatest number of procedure-specific models and subsequent validation studies have been carried out in the field of endourology (Abdul et al. 2016). Some are low fidelity and rests are high fidelity with high cost.

The major issue with the use of these devices in the developing world is their cost. However, efforts are required to attain high levels of training more quickly without compromising the safety and quality of care given to patients. This means that the developing world needs low-cost simulators for training of urological residents (Raza, Soomro & Ather 2011).

In Bangladesh access to a simulator system is difficult due to less accessibility and availability. Though Bangladesh is a developing country and unable to spend more money for simulator based educational system homemade simulators are introduced to see the feasibility and appropriateness of these instruments.

### Materials and Methods

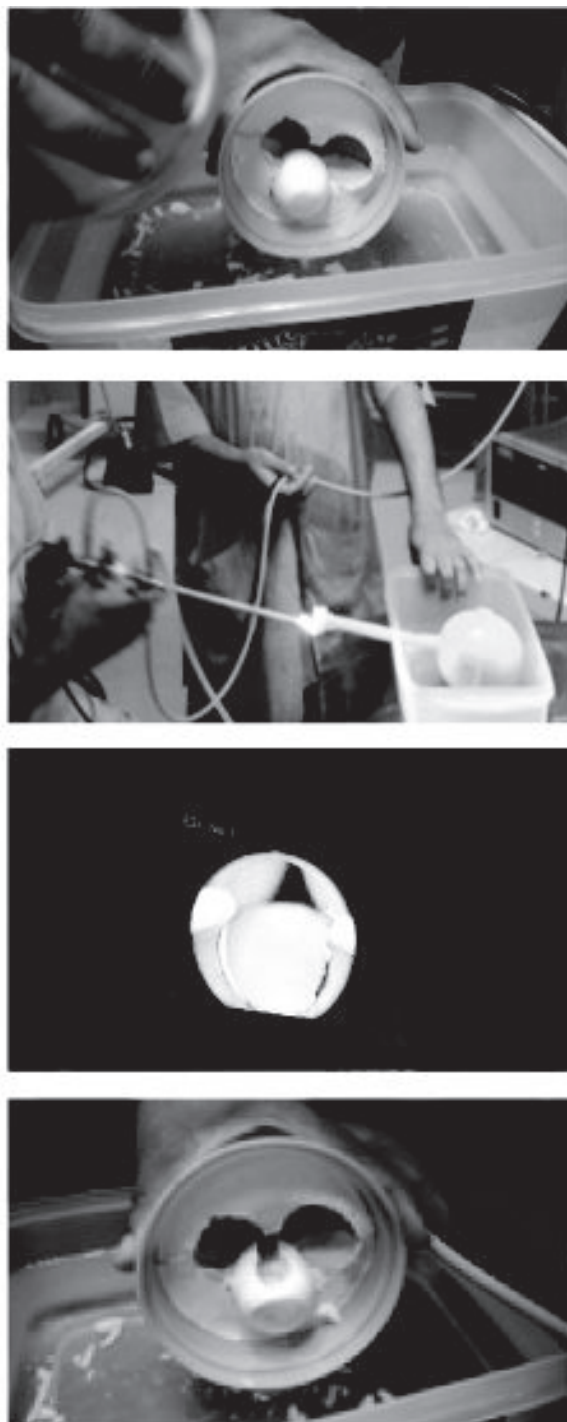
This was an observational study placed in the Department of Urology, NIKDU and in a private hospital from February 2019 to October 2019. Sample was collected by Purposive sampling. Participants were collected from Urology residents and young urologist of NIKDU. Total participants were twenty six (26). Among them Twenty (20) were urology residents and Six (6) were young urologist. Urology residents and young urologists who were interested to take part in simulation training and survey are included in this study.

We collected the required material to make simulators from simple material of domestic usage and some from nearby shop and electronic markets.



**TURP Simulator**

TURP homemade simulator (Figure 1) was made from a Lollypop box and white cement and penis part is made of plastic pipe with part of injection port of two liter saline bag. Boiled eggs or potatoes is used as prostate. Whole things were kept in a container to collect water and then drain.



**Figure.-1: TURP Simulator**

**Ureterorenoscope (URS) Simulator**

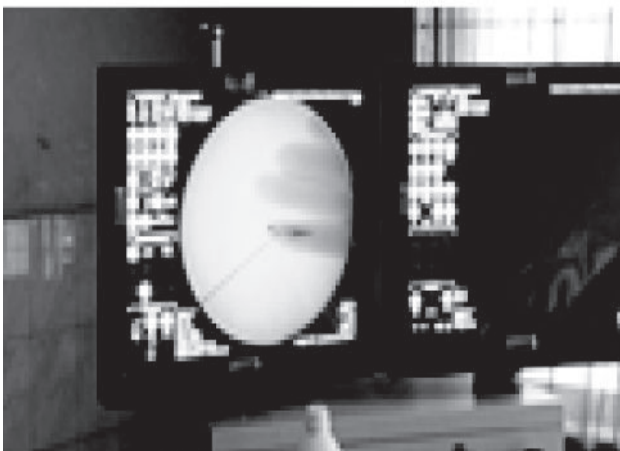
Within URS simulator (Figure 2) urinary bladder was made by plastic football and ureteric orifice was made by part saline bag and body of ureter was made by soft plastic pipe and part of injection port of two liter saline bag. Whole things were kept in a container made of used water bottle to collect water and then drain.



**Figure 2: Ureterorenoscope (URS) Simulator**

### PCNL Simulator

We used part of a condemned patient bed as patient body in PCNL simulator (Figure 3). Within it gloves filled with contrast mixed water is used as kidney calyceal system.



**Figure 3: PCNL Simulator**



**Figure 4: Laparoscopic Simulator**

### Laparoscopic Simulator

Trainer box of Laparoscopic homemade simulator (Figure 4) was baby bathtub collected from a local DIY shop and purchased webcam from electronic market. The webcam was mounted inside the baby bathtub. The energy-saving fluorescent light was mounted behind the webcam. Holes were made and patched with part of injection port of two liter saline bag to accommodate the insertion of laparoscopic instruments. Appropriate electrical connections were made and a simple laptop computer was used to monitor the simulator inside.

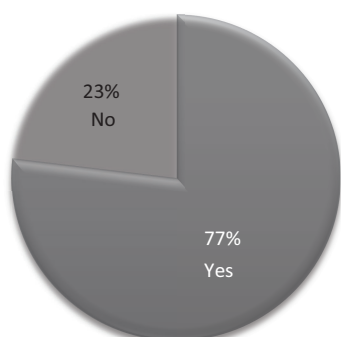
All simulators were made of domestic material of low cost and easily available. After making simulators, those were examined in an institution. Pros and cons were documented black and white. Then we decided to perform a study among the urology residents and young urologists. A questionnaire was prepared. A good number of residents and young urologists were present in the study. Among them 20 were urology residents and six were young urologists. All of them performed procedures in TURP simulator, URS simulator, PCNL simulator and laparoscopy simulator. The questionnaire was supplied to the residents and young urologists after the procedures. All papers were collected and results were calculated.

**Questionnaire**

1. Is there any incorporated simulation training program in your residency curriculum?	Yes	No
2. Do you have access to a simulation education centre?	Yes	No
3. Do you think there is a role for a standardized simulator training curriculum during your residency period?	Yes	No
4. Do you agree that simulators would improve operating room performance?	Yes	No
5. Do you think cost is a limiting factor?	Yes	No
6. Do you agree a simulation program would reduce patient risks and complications?	Yes	No
7. Do you think it's necessary to improve the quality of these homemade simulators?	Yes	No
8. Do you believe that simulation training should be a requirement of Urology residency?	Yes	No
9. Do you think these homemade simulators are helpful for you?	Yes	No

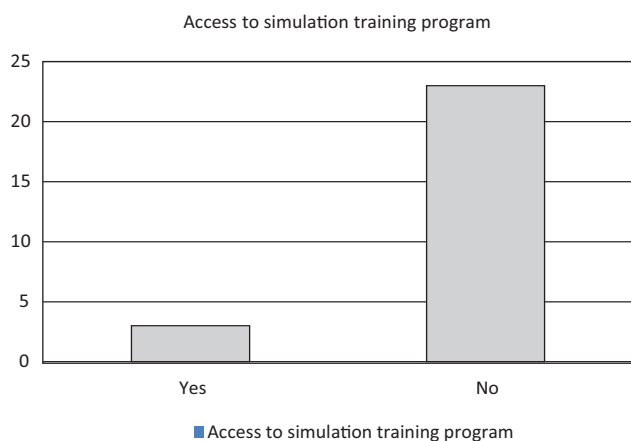
**Results:**

1. Is there any incorporated simulation training program in your residency curriculum?



Out of 26 participants, 20 (76.9%) participants expressed no incorporated simulation training program in residency curriculum.

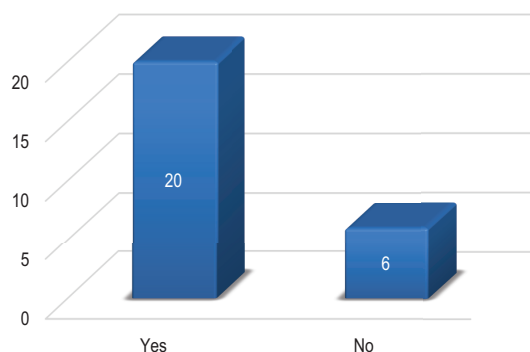
2. Do you have access to a simulation education centre?



23 (88.4%) participants have no access to a simulation education centre

3. Do you think there is a role for a standardized simulator training curriculum during your residency period?

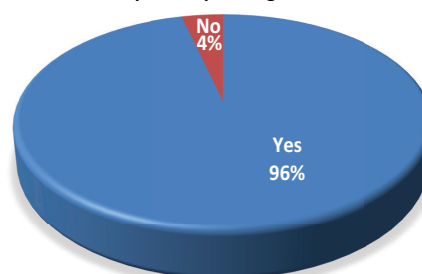
Usefulness of standardized simulator training curriculum during residency period



Out of 26 participants, 20 (76.92%) participants think that there is a role for a standardized simulator training curriculum during your residency period.

4. Do you agree that simulators would improve operating room performance?

Do Simulators Improve Operating Room Performance?



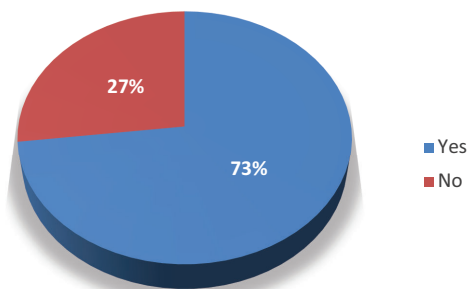
25 (96%) participants agreed that simulators would improve operating room performance.

5. Do you think cost is a limiting factor?



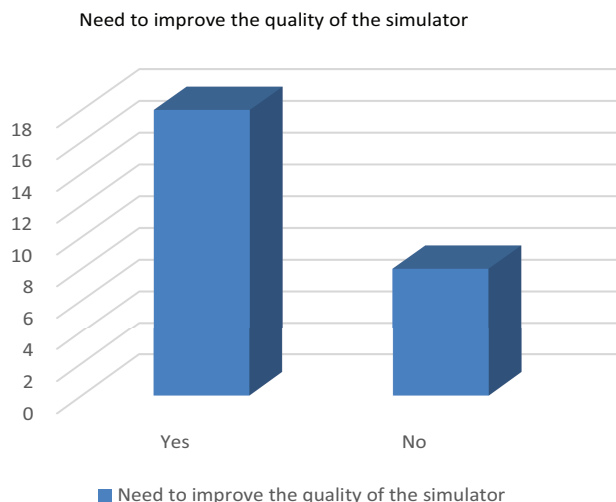
Out of 26 participants, 16 (61.5%) participants think cost is a limiting factors and 10(38.46%) participants didn't agree that cost is a limiting factor.

6. Do you agree a simulation program would reduce patient risks and complications?



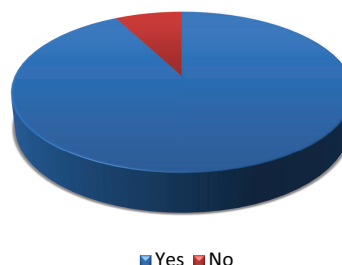
19 (73.08%) participants think that simulation practice can reduce patients risk & complications during surgery while 7 (26.92%) thinks not.

7. Do you think it's necessary to improve the quality of these homemade simulators?



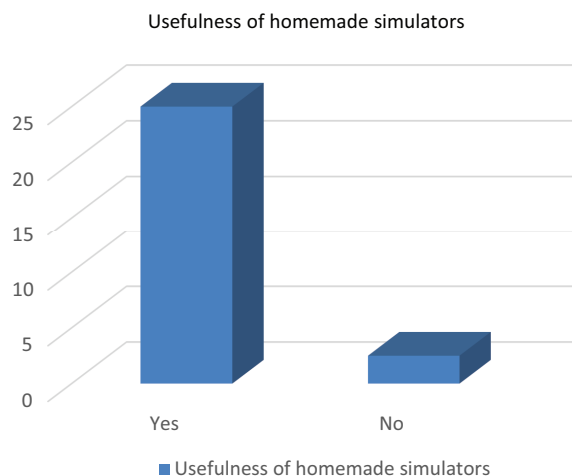
18 (69.23%) participants thinks the necessity to improve the quality of these homemade simulators to further improve the quality of simulator training program, while) 8 participants thinks these simulators are sufficient for training.

8. Do you believe that simulation training should be a requirement of Urology residency?



92.31% participants believe it is necessary to include the simulation training program in urology residency.

9. Do you think these homemade simulators are helpful for you?



Most of the participants (96.15%) thinks that these cost effective homemade simulators are helpful in improving surgical skills.

**Discussion**

In a study Residency program directors at Accreditation Council for Graduate Medical Education (ACGME)-accredited urology training programs in the USA were invited to respond to an anonymous electronic survey. The study evaluated the program directors' experiences and opinions for the current usage of existing urology simulators. Among them 60% (25/42) said that they

have incorporated simulation into their curriculum (Kamel et al. 2017). In our study we could not accumulate the directors who are involved in academic curriculum but the residents and young urologist. They commented that 23.08% (6/26) of them have incorporated simulation system into their curriculum. But it is far away from the educational system of the countries. The main reason of this situation may be the high cost of the simulators and mindset of the trainers.

The residents and young urologists were asked to answer on access to a simulation education centre during their residency period. The answers were quite frustrating. Affirmative answers were too less to 11.54%. Where in a study of ACGME in USA 97% (42/43) responders reported having access to a simulation education Centre. But here the responders were the program directors (Kamel et al. 2017).

Another study was conducted among program directors of USA. Among respondents, (41) access to a laparoscopy simulator was 76 % and reported access to cystoscopy, ureteroscopy, Transurethral resection and percutaneous access simulators was 16%, 21%, 8% and 12% respectively (Le 2007).

In our study participants were 26. 25 of them (96.15%) answered that simulation is absolutely beneficial for residents and young urologists. Result of the study is similar to other studies. Chow et al showed that Ninety-seven percent (63/65) viewed the laboratory as beneficial to their education (Chow et al. 2017). Kamel et al. 2017 showed that 87% (37/43) agreed that there is a role for a standardized simulator training curriculum (Kamel et al. 2017).

Halsteadian principle, which includes “see one, do one, teach one” has shifted to the paradigm of “See several, simulate many, do one perfectly” (Brewin & Nedas 2010). Repeated practice in simulators has a great role to be familiar with the procedures before going to practice in practical field. In our study 96.15% believe that simulators would build their confidence to improve operating room performance. In the study of Kamel et al. (2017) 75% (30/40) agreed that simulators would improve operating room performance (Kamel et al. 2017).

Bangladesh is a country of poor economy with huge population. Though its economy is going fast. But our country has less capacity to buy high fidelity simulators like Uromentor, Surgical SIM TURP simulator, URO-Trainer VR simulator etc. The high cost of these simulator is a huge hindrance for the poor countries.

The reflection of this hindrance is shown to the study. Here 61.54% (16/26) have a perception that cost is a limiting factor for simulation in our country. In the study of Kamel et al 2017 showed that a total of 64% (27/42) agreed that cost was a limiting factor (Kamel et al. 2017).

Complications are part and parcel of a surgeon's life. Most of the time it happens due to lack of expertise and experience. When a resident practice in a urological simulators will help enhance clinical competence by enabling an easier and earlier amalgamation of technical and decision-making skills, and a calm response to stressful surgical situations. As a result he will face less complications than others in his surgical life. In the study we found that 73.08% (19/26) believe that simulation program would reduce patient risks and complications. Kamal et al 2017 commented that 38% (16/42) agreed a simulation program would reduce patient risks and complications (Kamel et al. 2017). Additionally, Aggarwal & Adhikary 2017 said that simulation training significantly reduces operative times, as well as the possibility of complications (Aggarwal & Adhikary 2017).

Homemade simulators are made of household materials. Polished appearance and high fidelity is not possible. Reflection of this situation is found in our study. Most of the participants 69.23% (18/26) realized the improvement of the simulators.

Among 26 participants 92.31% (24/26) persons emphasis that simulation training should be a requirement of urology residency. Because without this it will be difficult for young urologists to survive in the field of competition. Chow et al. 2017 found that sixty-seven percent (42/63) believe that simulation training should be a requirement of Urology residency (Chow et al. 2017).

Optimistic result came out when most of the participants (96.15%) think that these cost effective homemade simulators are helpful in improving surgical skills.

### **Conclusion:**

In the early period of one's urological career, simulators would help shorten the learning curve by enabling repetitions and revisions. If such training is well-controlled and supervised, this practice will make the young urologists adept at dealing with real-life intraoperative situations in an intellectual, skilled and less stressful manner. Homemade simulators could be a solution to meet the current needs in the field of urology in our country.

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## OUTCOME OF PUV ABLATION AT BANGABANDHU SHEIKH MUJIB MEDICAL UNIVERSITY

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**Introduction and Objective:** Posterior urethral valve is the most common cause of congenital obstructive lesion in childhood exclusively in male baby, occurring at the distal portion of the prostatic urethra. Diathermy fulguration of valve is one of the commonest modalities which has been practiced by Pediatric Urologist since decades where success rate ranging from 50-70%. Despite high success rate, complications like urinary tract infections, bladder dysfunction, residual valve and renal impairment may develop in significant number of patients. We have evaluated the outcome of valve ablation among the patients in our institute.

**Methods:** The procedures were done under paediatric urology division in the Department of Urology, BSMMU, Dhaka from January 2013 to June 2019. A total 85 patients were diagnosed as a case of PUV and underwent

valve ablation. Among them 72 patients came for regular follow up. Ablation was performed either by fulguration or cold knife incision. Fulguration was done with Bugbee electrode with 8.5Fr cystoscope in under 2 years of age. Over 2 years of age 11Fr resectoscope was used with hook electrode or sickle cold knife. Patients were followed up at 3, 6, 12 months and then annually after initial intervention. Their subjective and objective findings were assessed with improvement of symptoms, urinary incontinence, flow rate, USG of KUB with MCC and PVR, serum creatinine and VCUG at 6 months.

**Results:** Age of the patients ranges from 3 months to 13 years and mean age was 2.5 years. Mean follow up period 22 (1–60) months. 45 (62%) patients have significant improvement of the outcome. 27(38%) patients developed bladder dysfunction in the form of frequency, urgency and urge incontinence. Hydronephrosis was improved, PVR and Serum creatinine level were reduced in most of the cases. 12(17%) patients had static or raised serum creatinine and were managed accordingly. Cold knife incision had almost similar outcome. There were no significant early and late postoperative complications.

**Conclusions:** Early intervention has better outcome. Cold knife incision is equally effective in comparison to diathermy fulguration in the management of posterior urethral valve in our short term follow up. Further follow up of longer duration is required to determine the ultimate bladder function and development of ESRD and quality of life.

**Key words:** Posterior urethral valve, cold knife incision, diathermy fulguration.

## SELF-INFLICTED UROLOGICAL INJURY: OUR EXPERIENCE IN A TERTIARY-LEVEL CENTER

Nahid Rahman Zico, Rajiv Mazumdar, K. M. Arifur Rahman

**Objectives:** Aim of this study is to evaluate the incidence, contributing factors, management and outcome of treatment in patients with different types of self-inflicted urological injuries attending in a tertiary-level urological center.

**Materials and Methods:** From October 2018 and September 2019, hospital records of 129 patients

attended with self-inflicted catheter-related injuries, foreign body insertion and genital mutilation in Dhaka Medical College Hospital, Bangladesh were analyzed retrospectively. Demographic profile, presentation, diagnosis, motivating factors, form and mechanism of injury, management, complications and final outcome of these patients were evaluated.

**Results:** Of about 8000 urological procedures 1.61% were involved in self-inflicted urological injuries and out of 36000 attending patients, 0.35% have presented with this type of injuries. Among 129 patients, 104 patients (80.62%) presented with catheter-related injuries, 15 patients (11.63%) with self-inflicted foreign body insertion in lower genitourinary tract and 10 patients (7.75%) with genital self-mutilation. Mean age was 54.2 years and 124 patients were male, 3 female and 2 children. Motivating factors were: psychiatric disorders (14%), medical illness (57%), self-relief (19%) and autoerotism (6.2%). Short term outcome was good in 128 patients and one patient died. Regarding follow up, 47 patients (36.43%) of catheter-related injury turned out for follow up and of them 32 patients developed stricture urethra. Rest did not visit for follow up.

**Conclusion:** Self-inflicted urological injuries are uncommon events but often difficult to manage. Prior medical illness, psychiatric disorders, attempted self-relief and autoerotism are the common motivating factors. Besides urological management, psychosocial rehabilitation is important through appropriate consultation and counseling. Though short-term procedure-related outcomes are generally good, final outcomes remain variable.

**Keywords:** Self-inflicted injuries, foreign body insertion, genital self-mutilation

## OUR INITIAL EXPERIENCES WITH LAPAROSCOPIC UROLOGIC SURGERY.

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**Introduction and Objective:** Recently, laparoscopic surgery has been increasingly employed in urology due to improvements in technical capabilities and experience.

Laparoscopic surgery comes with many advantages compared to open surgery such as lesser degree of pain and haemorrhage, shorter hospital stay, and better cosmetic results. This study was carried out to evaluate outcomes and complications of urological laparoscopic surgery cases performed in Chattogram Medical College, Chattogram.

**Methods:** This was a hospital based prospective observational study of total 29 patients, who received laparoscopic surgery of any kinds between December 2018 and November 2019 for urological causes with a minimum one month follow-up. Included patients were assessed in terms of demographic characteristics, preoperative diagnosis, type of laparoscopic approach, duration of surgery and hospitalization, complications before and after surgery, and need for conversion to open surgery.

**Results:** 12 of included patients were women, 17 were male, and the mean age was 45.03 years. All patients underwent trans-peritoneal and no patients received retroperitoneal procedures. While 2 patients received renal cyst excision, 4 had simple nephrectomy, 5 had ureterolithotomy, 9 had radical nephrectomy, 1 had radical cystectomy, 2 had adrenalectomy, 3 had pyelolithotomy and 3 had pyeloplasty. Two of the 29 patients required conversion to open surgery. Except these patients, no major complication or mortality was encountered. The mean duration of surgery for the most commonly applied procedures were as follows: renal cyst excision 87.5 (70-105) min, simple nephrectomy 141.25 (120-170) min, ureterolithotomy 120 (100-140) min, radical nephrectomy 215.56 (180-260) min, pyelolithotomy 120 (100-140) min, and pyeloplasty 156.67 (130-190) min. The mean hospital stay was  $4.7 \pm 2.1$  (2-12) days.

**Conclusions:** The success and complication rates of the laparoscopic surgeries performed in our hospital were consistent with those reported in the literature. In the light of technological advances and increasing experience, we believe that laparoscopic surgery is an effective technique with excellent outcome that is a safe and feasible alternative to open surgery.

**Key words:** Laparoscopy, initial experiences, prospective

## RENAL FUNCTION AFTER NEPHRON-SPARING SURGERY VERSUS RADICAL NEPHRECTOMY FOR RENAL CELL CARCINOMA: A COMPARATIVE STUDY.

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*BSMMU, Dhaka*

**Introduction and Objective:** Renal cell carcinoma (RCC) is the third common malignancy of the genitourinary system. It accounts for 90% to 95% of neoplasm arising from the kidney.

Currently, the available treatments for RCC consist of nephron sparing surgery (NSS) and radical nephrectomy (RN). The main advantage of NSS is that it can preserve renal function after the removal of renal tumors resulting in a better health-related quality of life. But NSS is associated with higher percentage of positive surgical margins compared with RN. Due to similar oncological outcome- localized (upto T1) RCC are best managed with NSS. However, whether NSS is a better than RN for RCC still remains controversial in some aspects.

**Objective:** To compare the time-dependent changes of renal function by estimated glomerular filtration rate (eGFR) after nephron-sparing surgery and radical nephrectomy for renal cell carcinoma.

**Methods:** It was an experimental study conducted in department of Urology, BSMMU from January, 2017 to September, 2018. Total 52 patients (age range from 35-75 years) were randomly allocated into two groups by lottery method. Among them in group-A (23 patients) - NSS and in group -B (23 patients)-RN were followed up. Patients having unilateral renal tumor (upto 7cm) with normal functioning opposite kidney were included in this study.

**Results:** There was no significant difference in preoperative serum creatinine and eGFR in both groups but the time-dependent changes of eGFR after RN showed plateau form initially and then gradually declined from the first postoperative day upto 12 postoperative months.

In case of NSS, a lowest eGFR was observed in first postoperative day and gradually recovered to near preoperative level at 12 months. The mean ( $\pm$ SD) eGFR decreased more significantly in RN (group -B 18.56 ml/min) than NSS patients (group- A, 6.31 ml/min) from



preoperative to 12 months after operation and which was statistically significant ( $p < 0.001$ ).

**Conclusions:** Time dependent changes of eGFR is minimum after nephron-sparing surgery than radical nephrectomy compared at preoperative and 12 post operative months. NSS is therefore the better procedure for preserving renal function.

**Key words:** Renal cell carcinoma, radical nephrectomy, nephron sparing surgery, estimated glomerular filtration rate.

## OUTCOME OF BUCCAL MUCOSAL GRAFT URETHROPLASTY IN MALE URETHRAL STRICTURE DISEASE: A SINGLE CENTER EXPERIENCE

*K. M. Arifur Rahman, Nahid Rahman Zico*

**Background:** Urethral stricture disease is a challenging condition to treat and several approaches including direct visual internal urethrotomy (DVIU) and anastomotic or substitution urethroplasty based on the use of flaps and graft have been reported. The aim of this study is to determine the outcome and complications in patients with buccal mucosal graft (BMG) urethroplasty for male urethral stricture disease in a single center of Bangladesh.

**Materials and Methods:** Hospital records of 65 patients who underwent various forms of BMG urethroplasty between January 2018 and December 2019 at Urology Department in Dhaka Medical College Hospital were retrospectively analyzed. Success and failure in terms of stricture recurrence, patient demographics, stricture etiology and anatomy, and adverse outcomes of: post-micturition dribbling (PMD), erectile dysfunction (ED) and complications were recorded.

**Results:** The mean age was 38 years (range: 18-58 years). Average follow-up was 7.5 months (range: 3-12 months). Total re-stricture rate was 9.23% ( $n=6$ ). Meatal stenosis was observed in 6.15% cases ( $n=4$ ). PMD was reported in 5 patients (7.69%) and ED in 12.30% ( $n=8$ ). All ED was non-organic and responded to oral PDE5 inhibitor treatment. The post operative complications were reported in 12 patients (18.46%).

The most frequent complications recorded were urinary fistula ( $n=4$ , 6.15%), wound infections ( $n=3$ , 4.62%) and graft contracture ( $n=2$ , 3.08%), all reported after penile and panurethral urethroplasty.

**Conclusions:** BMG urethroplasty represents a reliable therapeutic option for patient with urethral strictures with a success rate of 84.62% at 7.5 months follow-up. Complications are more common in penile and panurethral strictures.

**Key Words:** Urethra, urethroplasty, stricture, buccal mucosal graft (BMG)

## OUTCOME OF THE RENAL TRANSPLANTATION IN BANGABANDHU SHEIKH MUJIB MEDICAL UNIVERSITY

**B M Saiduzzaman, Tohid Md. Saiful Hossain , Md. Habibur Rahman , AKM khurshidul Alam**

Renal transplantation is the optimal choice of treatment for the patients of “End stage renal disease” due to survival benefit & Cost effectiveness with near normal healthy life.

In BSMMU we performed 556 live related renal transplantation. We evaluated all donors and recipients prior to surgery with all relevant investigations like blood grouping, HLA typing, Tissue cross matching etc. with maintaining all ethical aspects of transplantation. We proceed for transplantation after doing a board meeting including nephrologists, transplant urologists, Anesthesiologist and relevant specialities. During Procedures Donor & Recipient surgery were performed simultaneously side by side Operation theatre with close collaboration of two surgical team. Open donor nephrectomy time was approximately 90-180 minute. Recipient surgery time was approximately 90-150 minute. After donor nephrectomy – we perfused the donor kidney with solution composed of Hartmann solution, Lignocaine, Heparin. Warm ischemia time average 30 -90 second. Cold ischemia time average 60-90 minute. We closely monitored the donor & recipient after surgery.

In donors no major complications were experienced and discharged on 7<sup>th</sup> to 10<sup>th</sup> Post Operative day with advices

for follow up schedule. In recipients, we discharged on 14<sup>th</sup> to 21<sup>st</sup> Post operative day. We faced following complications in recipients – Acute rejection, Post wound infection, Excessive drain output managed conservatively, Lymphocele -2 cases ; managed accordingly, Venous thrombosis 2 cases needed graft nephrectomy. Our immediate success of renal transplant in BSMMU is 96-98%. One year survival of recipient is 90-92%.

IN BSMMU, we overcome so many hurdles to continue the renal transplantation program. Our outcome is comparable to any High volume centre.

## LIVER INJURY DURING SUPINE PERCUTANEOUS NEPHROLITHOTOMY (PCNL)

Mambu T<sup>1</sup>, K.M. Patel<sup>2</sup>, M Ali, D Swallow<sup>1</sup>

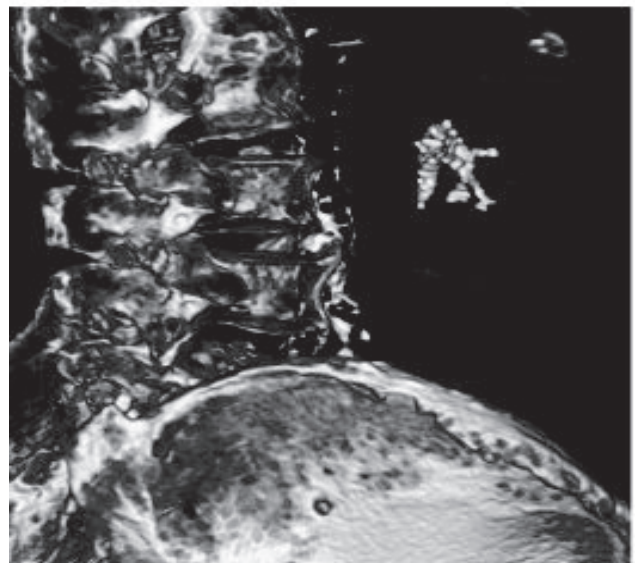
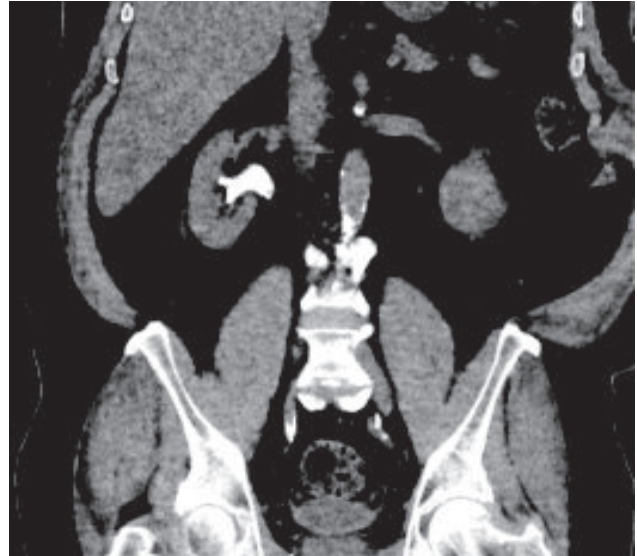
*Urology Department, Broomfield Hospital, Court Rd, Chelmsford CM1 7ET; Urology Department, Norfolk and Norwich University Hospital, Colney Lane Norwich NR4 7UY*

A 71 year old man presented with right intermittent colic and CT KUB demonstrated a right lower pole and renal pelvic as well as an upper ureteric stone. In addition there are appearances suggestive of PUJO. DMSA scan demonstrated 43% right split function. The presence of PUJO contradicts ureteroscopy and therefore supine PCNL was offered.

The procedure was performed using the Galdakao-modified Valdivia decubitus approach. Operative time was 2 hours inclusive of renal puncture performed on table by an experienced radiologist. Minimal blood loss was recorded and the patient remained cardiovascularly and haemodynamically stable. Complete clearance of stone burden was confirmed visually and under image intensifier. A ureteric stent was not inserted as per the patient's wishes but a covering nephrostomy was inserted with antibiotics upon discharge.

FBC and renal function was normal post operatively and the patient was afebrile and pain free. Upon clamping of the nephrostomy there was peri-nephrostomy leak of urine. On day 3 the patient was discharged with nephrostomy in situ to return for consideration of removal of nephrostomy in clinic.

Twelve days post operatively the patient presented with abdominal pain and raised inflammatory markers. He



was commenced on intravenous antibiotics and a contrast enhanced CT AP showed a hypodense liver lesion with surrounding inflammatory stranding. Of note the nephrostomy tube traversed the lesion. Further IV antibiotics and analgesia were given and the nephrostomy removed under radiological guidance 26 days following the initial procedure as an inpatient with a proviso for embolisation if warranted. The procedure was uneventful and patient was discharged home



**Discussion:** Percutaneous nephrolithoapaxy (PCNL) is the first line approach for large (>20mm), staghorn stones, multiple or inferior renal calyx stone and those not amenable to ESWL or endoscopic control (1). The procedure is safe and is associated with a few but specific complications (2). A systematic review of almost 12,000 patients showed a 0.4% rate of organ injury (2,3)

Liver injury during PCNL is in itself very rare and not encountered even in large PCNL series though may be underestimated due to resolution without sequelae. Supine PCNL has known increased risk of adjacent organ damage compared to prone PCNL, however, hepatic trauma is rarely encountered. Avoiding supracostal puncture through the 10<sup>th</sup> intercostal space and performing CT guided percutaneous access in patients with known hepatomegaly may avoid liver injury. Post operative insertion of ureteric stent negate the need for a post PCNL nephrostomy and reduce the risk of hepatic trauma.

**Conclusion** Liver injury during PCNL is rare and often unreported as the injury may heal without any symptom or clinical sequelae. Awareness with regards to pre-operative planning for renal access and patient counselling in terms of complications are paramount to

good clinical practice. Management of the complication once identified is usually conservative but in the event of haemodynamic instability can include radiologically guided embolisation or surgical exploration.

## **PENILE INJURIES: 8 YEARS MANAGEMENT EXPERIENCE IN A TEACHING HOSPITAL.**

**Nasir uddin Kazal, Masum Hasan, Saroar Hossin, Fahmida Bayes Kakan, Shuvo Roy**

*Cumilla Medical College*

**Introduction and Objectives:** Penile injuries are urological emergency that afflicts the penis. Common injuries are fracture, amputation, degloving and avulsion, entrapment and strangulation.

**Objectives:** To assess the nature of penile injuries and treatment outcome.

**Methodology:** we reported our 8 years' experience with penile injuries. We retrospectively reviewed records of 82 cases between June 2011 to September 2019 at Cumilla Medical College. Penile injuries with urethral injuries also included in this study. Patients evaluated with history, physical examination and necessary investigations. Patients were divided into 4 groups. Group I- penile fracture 56 patients (68.29%), group II penile amputation 17 patients (20.73%), group III degloving and avulsion 6 patients (7.31%), group IV – entrapment and strangulation 3 patients (3.6%). Grading of injuries done using American Association for the Surgery of Trauma (AAST, organ injury scale for penile injury. Patients were managed with surgical procedure according to its merits. In group I- patients treated by surgical exploration with degloving or longitudinal incision, in group II amputated remnant part refashioned and meatoplasty, in group III degloved penis buried into scrotum followed by refashioned or surgical dressing followed skin graft, in group IV cut and removed the ring structure in case of viable penis or debridement followed by dressing and skin graft. Follow up period was 6 months to 3 years.

**Results :** 82 patients with age range 3- 60 years mean 45 years were reviewed from June 2011 to September 2019. In group I among 56 patients 51 (91.07%) had satisfactory recovery, 4 (7.14%) patients complain of ED and 1 (1.78%) had penile nodule. In group II 15 patients (88.23%) had good improvement but 1 (5.88%) had ED and 1 (5.88%) had meatal stenosis. In group III among 6 patients 5 patients (83.33%) had good

improvement and 1 had ( 16.66%) impaired sexual function. In group IV , 2 patients ( 66.66%) had satisfactory improvement and 1 lost from followup.

**Conclusion :** Most penile injuries have a typical history and clinical features and rarely required any investigations. Surgical treatment provide satisfactory outcome.

**Keyword:** Penile injuries, different types, surgical treatment.

## OUTCOME OF OPEN PYELOPLASTY ON IPSILATERAL RENAL FUNCTION IN CHILDREN

**Narayan Dulal, ASM Shafiul Azam, Isteaq Ahmed Shameem**

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**Introduction:** Pelvi-ureteric junction obstruction is the most common cause of upper urinary tract obstruction in children with an overall incidence of 1:1500. Andersons-Hynes pyeloplasty is still the popular and most preferred treatment modality of PUJ obstruction.

**Objective:** The objective of this study is to determine the ipsilateral renal function after pyeloplasty in children.

**Patients and methods:** This was a prospective observational study of patients with ultrasonographically demonstrated hydronephrosis and pelvi-ureteric junction obstruction evidenced by diuretic renogram. Andersons-Hynes pyeloplasty was performed in 92 patients in paediatric urology division of department of urology of Bangabandhu Sheikh Mujib Medical University between January 2007 to December 2018. Among them, 56 patients came for follow up and 36 patients lost from the follow up. Patients were followed up at 1, 3, 6 and 12 months after intervention. Data were collected by review of records and documents in data collection sheet. Data were analyzed by using paired t-test. Level of significance was set as  $P < 0.05$ . Statistical analysis was done by SPSS (SPSS Inc. Chicago, IL, USA), version 16.0.0.

**Results:** The male and female ratio was 1:0.33. Mean age of the patients was  $6.35 \pm 0.5$  years. Left and right side ratio was 1.5: 1. The mean  $\pm$  SD of pre-operative cortical thickness was  $3.67 \pm 0.91$  and post-operative thickness after 1 month, 3 months, 6 months and 12 months were  $3.95 \pm 0.91$ ,  $4.61 \pm 1.18$ ,  $5.15 \pm 1.31$ , and  $6.22 \pm 1.37$  respectively. The mean  $\pm$  SD of split renal function were  $24.22 \pm 3.42$ , and  $29.14 \pm 4.20$  in pre-operative and post-operative respectively. The mean  $\pm$  SD of split GFR were  $25.38 \pm 4.11$  and  $34.47 \pm 6.30$  in pre-operative and post-operative respectively. Renal

functional status was seen as improvement in 51, stable in 3, and deterioration in 2 patients. Among patients with improved renal function, 33(64.7%) patients were in group d"5 years, 11(21.5%) in age group 6-10 years and 7(13.7%) in age group > 10 years.

**Conclusions:** In patients with pelvi-ureteric junction obstruction, renal function improved better when surgery was performed at younger age preferably less than or equal to 5 years.

**Key Words:** Pelvi-ureteric junction obstruction, Andersons-Hynes pyeloplasty

## BILATERAL GIANT ANGIOMYOLIPOMA IN A PATIENT – A CASE OF TUBEROUS SCLEROSIS COMPLEX

**M.M. Hasnat Parvez**

*MS (thesis part student) DMCH*

Bilateral angiomyolipoma (AML) also referred to as renal hamartoma, is a solid tumour without malignant characteristic. Tuberous sclerosis complex (TSC) is a rare multisystemic autosomal dominant disorder. About 20% of renal AML are associated with TSC & about 34-80% patient with TSC have renal AML. Giant renal AML (more than 10 cm) are at risk of spontaneous rupture. Here, a 40 yrs female presented with abdominal distension, bilateral flank pain (Rt>Lt) & haematuria. She has history of childhood epileptic attack, got multiple subependymal & cortical nodules in brain CT. Following radiological evaluation she was underwent Rt sided total nephrectomy first (more size & symptom). There were only few cases of giant bilateal AML reported in literature to date. Due to large size, bilateral & associated TSC, it is crucial to report this case.

## CORRELATION BETWEEN PSA DENSITY AND GLEASON SCORE IN PROSTATE CANCER PATIENTS.

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**Background:** Prostate cancer is the most common form of malignancy and the second leading cause of cancer death among men. The histological grade is an independent determinant of disease prognosis and

survival. The Gleason System (GS) grading is the most widely accepted classification. Several recent studies have searched for factors that could predict GS upgrading. High prostate specific antigen density (PSAD) has been shown to be predictors of risk progression in many studies, reflecting the possibility of undetected aggressive cancer.

**Objective:** To detect the association between PSAD and Gleason score in prostate cancer patients.

**Methodology:** This cross sectional study was carried out at the department of urology, Sir Salimullah Medical College Mitford hospital, Dhaka, Patients diagnosed as prostate cancer meeting the inclusion criteria admitted in the above mentioned place was the study population. Statistical analyses were carried out by using the Statistical Package for Social Sciences version 23.0 for Windows (SPSS Inc., Chicago, Illinois, USA). Student t-test was used for continuous variables. Pearson's correlation coefficient was used to test the relationship between the groups. P values <0.05 was considered as statistically significant.

**Results:** The mean age was found  $69.2 \pm 7.7$  years with range from 50 to 85 years. The mean volume of prostate was found  $42.3 \pm 17.6$  ml with range from 13.0 to 68.0 ml. The mean Gleason score was found  $7.8 \pm 1.4$  with range from 6.0 to 10.0. More than one third (33.7%) patients had PSA density 0.15-0.5 ng/ml/ml. Three patients had found Gleason score 9 (5+4) within PSA density 0.51-1.0 ng/ml/ml, 5 patients within PSA density 1.1-1.5 ng/ml/ml, 3 patients within PSA density 1.51-2.0 ng/ml/ml, 6 patients within PSA density 2.1-2.5 ng/ml/ml, 5 patients within PSA density 2.51-3.0 ng/ml/ml and 2 patients within PSA density >3.0 ng/ml/ml. The difference was statistically significant ( $p < 0.05$ ) among seven groups. Positive correlation ( $r = 0.717$ ;  $p = 0.001$ ) between PSA density with Gleason score.

**Conclusion:** In this study, we found there is a strong correlation between PSA density and Gleason score.

## COMPARISON OF OUTCOME OF URETERIC CATHETER AND DJ STENT AFTER URS ICPL OF LOWER URETERIC STONES

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**Background.** Ureterorenoscopy (URS) is commonly practiced procedure in urology for the management of

lower ureteric stones. Most urologists advocate placement of routine DJ stent for 4 to 6 weeks after ureteroscopy especially to reduce the incidence of postoperative ureteral oedema and ureteral stricture development, and possibly to assist in the passage of small stone fragments. However, the use of ureteral stents is not without its attendant complications. Two days indwelling of ureteric catheter following URS for lower ureteric stone might be a good alternative to the use of DJ stent for conventional 4 to 6 weeks. Temporary ureteral catheters, in contrast to DJ stent ones, do not expose patients to higher risks of migration, infection, breakage, encrustation, and stone formation.

**Objective.** To compare the outcome of ureteric catheter and D-J stent after URS ICPL of lower ureteric stones by the means of Visual Analogue Scale score of flank pain, Analgesic requirement and willingness to Re-surgery, Irritative features, Urine and stent/ureteric catheter tip culture, Organisms isolated from urine, DJ stent and ureteric catheter tip culture

**Materials and Method.** Study population included 90. Among them, 02 dropped out from the study. Finally, Group A (Ureteric catheter) included 43 and Group B (DJ stent) included 45 patients. A Quasi-experimental study done between July 2017 to July 2019 in the Department of Urology, Sir Salimullah Medical College and Mitford Hospital, Dhaka, Bangladesh. Patients were enrolled and reviewed by Visual Analogue Scale score of flank pain, Analgesic requirement and willingness to Re-surgery, Irritative features, Urine and stent/ureteric catheter tip culture, Organisms isolated from urine, DJ stent and ureteric catheter tip culture. Institutional ethical committee clearance was taken before commencement of the study.

**Results.** Flank pain was assessed by VAS score. Mean VAS score was significantly higher in Group-B on Postoperative Day 1,  $2.49 (\pm 1.94)$  versus  $3.78 (\pm 1.84)$  ( $p = 0.55$ ); on day 7 and 14,  $0.52$  versus  $2.90$  and  $0.17$  versus  $2.40$  ( $p < 0.05$ ). 74.41% and 28.89% patients in Group-A and Group-B responded affirmatively when asked "Whether you would opt for the same procedure again as treatment if you develop ureteral stones in the future?" ( $p < 0.05$ ). Irritative features at 2 weeks postoperatively was 2.53 and 10.82 in Group-A and Group-B respectively ( $p < 0.05$ ). the rate of growth of organism in urine did not differ significantly between two groups ( $p > 0.05$ ). But colonization of bacteria in DJ stent was significantly higher than ureteric catheter

colonization ( $p < 0.05$ ). Pseudomonas and E.coli were most common pathogens.

**Conclusion.** Short duration (2 days) ureteric catheter placement after URS can reduce postoperative loin pain, irritative voiding symptoms, increased patient compliance, urinary bacterial growth and ureteric catheter colonization in comparison to conventional placement of DJ stent for 3 weeks following URS ICPL of lower ureteric stone. Hence, it can be inferred that placement of open-ended catheter was better tolerated by patients compared with an indwelling DJ stent.

**Key Words.** Lower Ureteric stone, Ureterorenoscopy, ICPL, Ureteric catheter, DJ stent

## POSTNATAL APPROACH OF ANTENATAL HYDRONEPHROSIS : CASE REPORT

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**Introduction:** Hydronephrosis is the most common (about 50%) finding of antenatal sonography of which Pelvi-ureteric junction obstruction (PUJO) is the most frequent differential diagnosis comprising about 40-60 % of cases. Although Andersons-Hynes pyeloplasty is still the popular and most preferred treatment modality of PUJ obstruction role of conservative treatment cannot be ignored.

**Objective:** The objective of these cases reporting is to reinforce those large series studies ongoing on postnatal management of antenatally detected hydronephrosis.

**Patients and methods:** Neonates with antenatally detected hydronephrosis having Renal pelvic

Anteroposterior diameter (RPAPD)  $< 10-15$  mm and SFU grade I and II were enrolled for conservative approach. They were prospectively observed with ultrasonographically measuring RPAPD, SFU grade of hydronephrosis at every 3 months. Diuretic renogram: initially at 6 weeks then 6 monthly or if there was any deterioration of ultrasound parameters. RGU and MCU only if indicated to rule out infravesical obstruction and VUR. Parents were counseled regarding the risk of UTI and need for prompt management and antibiotic prophylactic was given in selected cases. This study is still going on since January 2019, Total 11 cases is being followed up. In last 2 months we have found resolution of hydronephrosis in 2 cases, 1 case needed A-H pyeloplasty and remaining are still in follow up with static results.

**Results:** Initial RPAPD was 13 mm (right kidney) in one case and 9 mm/9 mm (Bilateral hydronephrosis) in another with SFU grade II in both of them. There was complete resolution of right sided HDN in initial case and in another there was complete resolution of hydronephrosis on left side by 8 months and static trend on right side. In both cases relative renal function and differential GFR has increased compared with earlier measurements. One case developed symptoms and increase in RPAPD and deterioration in renal function so needed A-H pyeloplasty.

**Conclusions:** Neonates been diagnosed as cases of antenatally detected hydronephrosis due to PUJO having RPAPD  $< 10-15$  mm and SFU grade I and II without symptoms can be followed up until symptoms develop or there is deterioration of renal functional status as evident by diuretic renogram and ultrasound parameters.

**Key Words:** Pelvi-ureteric junction obstruction, conservative treatment, Renal pelvic Antero-posterior diameter (RPAPD), Society of fetal urology (SFU), Hydronephrosis (HDN); Retrograde urethrogram (RGU); Micturating cystourethrogram (MCU)