

**Table 1**  
Treatment Group Distribution

	Group 1	Group 2	Group 3	Group 4
Mild ED (n)	15	21	10	14
Moderate ED (n)	20	25	4	–
Total (n)	35	46	14	14
Treatment	Li-ESWT only	Li-ESWT and Vardenafil 5 mg OD	Vardenafil 5 mg OD only	Control (no treatment)

**Conclusions:** Combination treatment of patients with mild to moderate ED using Li-ESWT and PDE5 inhibitors resulted in more sustained improvement in erectile function than monotherapy with either treatment. The observed increases in penile arterial velocity suggest that Li-ESWT stimulates penile neovascularization with prolonged and stable improvements of erection.

#### GUA-16 Treatment of ureterocele with thulium laser

Davit Rukhadze<sup>1</sup>, Teimuraz Dochviri<sup>2</sup>, Nino Gabunia<sup>1,2</sup>, Teimuraz Chigogidze<sup>1,2</sup>

<sup>1</sup>National Center of Urology, Tbilisi, Georgia; <sup>2</sup>Iv. JavakhiShvili Tbilisi State University, Faculty of Medicine, Urology Department, Tbilisi, Georgia

**Abstract:** Ureterocele is a cystic dilatation that develops in the intravesical part of the submucosal ureter. Ureterocele is the main anomaly associated with complete renal duplication, but it also occurs in a single system. The overall incidence in autopsies is around one in 4,000 children. Management is controversial with a choice between a non-operative approach, endoscopic decompression, ureteral re-implantation, partial nephroureterectomy, or complete primary reconstruction. In our case, we are doing an endoscopic decompression, with thulium laser. An indication with this technique is intravesical obstruction and contraindication is urolithiasis. It was a 64-year-old male patient with intravesical ureterocele, lower urinary tract obstruction, postvoid urine – 600 ml and Qmax – 4.7 ml/sec. After the surgery imaging control about ureterocele was absent, Qmax was 30 ml/sec, post void urine was normal. After one year, the results of clinical tests were same. An advantage of this technique is a low risk of reflux. We have already done in our center thulium decompression under the 10 patients. All those cases were successful.

#### GUA-17 Ureters implantation method into low-pressure small intestine reservoir

Shalva Gogeshvili<sup>1</sup>, Teimuraz Dochviri<sup>2</sup>, Nino Gabunia<sup>1,2</sup>, Teimuraz Chigogidze<sup>1,2</sup>

<sup>1</sup>National Center of Urology, Tbilisi, Georgia; <sup>2</sup>Iv. JavakhiShvili Tbilisi State University, Faculty of Medicine, Urology Department, Tbilisi, Georgia

**Abstract:** Urine derivation after cystectomy, or due to bladder function impairment more has been a pressing problem in urology for more than a century. Various techniques of urinary derivation after cystectomy due to bladder cancer or non-oncologic disease have been suggested. In the present day, more often, the artificial reservoirs are formed from the various intestinal segments. The article describes preoperative preparation of patients, surgical technique and efficiency of the specific method of implantation of ureters into low-pressure small intestine reservoir. It was a 65-year-old female patient with TB damage of the urinary tract. In our case, we are doing

cystectomy and then implantation of ureter into low-pressure small intestine reservoir.

**Results:** After the surgery we have not seen anastomosis stenosis and reflux. The method is technically simple and can be widely used in urology, does not require specific equipment, the risk anastomosis stenosis is quite low. The patient should be under the supervision of the Urologist after the surgery.

#### GUA-18 Estimation the efficacy of retroperitoneoscopic renal cystectomy

Sh. T. Mukhtarov<sup>1</sup>, F. A. Akilov<sup>2</sup>, D. Kh. Mirkhamidov<sup>2</sup>, B.A. Ayubov<sup>1</sup>  
<sup>1</sup>Republican Specialized Scientific-Practical Medical Center of Urology; <sup>2</sup>Tashkent Medical Academy

**Objective:** Estimation of the efficacy and safety of the retroperitoneoscopic operations for renal cysts.

**Materials and methods:** Retroperitoneoscopic operations (renal cysts deroofing) were performed for 152 patients.

**Results:** The mean duration of the operations were,  $35.7 \pm 6.1$  min; there were not any intraoperative complications; incidence of postoperative complications were 2.4%; hospital stay was, mean,  $2.2 \pm 0.1$  day; there were not any conversions to open operations and additional procedures in postoperative period.

**Conclusions:** Retroperitoneoscopic renal cystectomy is effective and safe procedure for the treatment of simple kidney cysts.

#### GUA-19 Laparoscopic partial resection of the renal tumors: our initial experience

Sh. T. Mukhtarov<sup>1</sup>, F.A. Akilov<sup>2</sup>, D. Kh. Mirkhamidov<sup>2</sup>, B. A. Ayubov<sup>1</sup>, Dj. A. Nazarov<sup>1</sup>  
<sup>1</sup>Republican Specialized Scientific-Practical Medical Center of Urology; <sup>2</sup>Tashkent Medical Academy

**Background:** The relevance of the study of nephron-sparing surgery on kidney tumors is determined by the widespread increase of the early diagnosis and incidence of renal tumors and the desire to preserve not only human life, but also his quality of life, ensuring maximum safe and active longevity.

**Purpose:** To acquaint with the initial experience of laparoscopic partial resection of the renal tumors in the Republican Specialized scientific-practical Medical Center of Urology (Tashkent, Uzbekistan).

**Material and methods:** From October 2016 through August 2019 laparoscopic partial tumor resection was performed in 30 patients. The median age of the patients was 48 years (range: 17–71 years). The size of the tumor ranged from  $2.1 \times 2.8$  cm to  $6.8 \times 7.4$  cm, in the stage – T1a-T2b. For planning the surgical procedure, the recommendations of the “European Scoring System for Laparoscopic Operations in Urology” and the RENAL nephrometric score were used to assess the degree of difficulty of laparoscopic intervention. The degree of complexity of the operation was characterized as “very difficult” (VD: the sum of the criteria is 15–16). The predictive risk according to the RENAL nephrometric score was high in 3 (10%) cases (10–12 points), medium in 15 (50%) (7–9 points), and low in 12 (40%) cases (4–6 points).

All operations were performed according to the standard technique with transperitoneal access, under endotracheal anesthesia.

The effectiveness of surgical treatment was evaluated by the following indicators: duration of surgery, time of thermal ischemia of the kidney, volume of blood loss, frequency of intra- and postoperative complications, length of stay of the patient in the hospital, timing of removal of

the drainage, relapse rate. Also, we checked the histological findings – tumor type, Furman gradation, status of the surgical site.

**Results:** Access conversion to open procedure was carried out in 1 (3.3%) case, due to technical difficulties with equipment. The duration of operations averaged  $148.2 \pm 23.1$  minutes (range: 90–300 min). Partial resection in 5 (16.7%) patients was performed without renal ischemia (“zero ischemia”), in 25 (83.3%) cases by clamping the renal artery, and the average time of thermal kidney ischemia was  $19.2 \pm 4.2$  minutes (range: 9–43 min). Simultaneous operations were performed in 3 (10.0%) cases, of them in 2 cases were performed ureterolithotomy, and in 1 case – cholecystectomy. The volume of intraoperative blood loss, on average, was  $182.5 \pm 25.1$  ml (range: 50–1000 ml), there was no need for blood transfusion.

Intraoperative complications were observed in 3 (10.0%) cases, including damage to the inferior vena cava (1 case), gross bleeding from the renal parenchyma (2 cases), in one of them there was a need for additional surgical intervention due to bleeding in early post-operative period – LP nephrectomy was performed.

Postoperative complications were observed in 3 (10.0%) patients, including the paranephral hematoma formation (1 case), hyperbilirubinemia (1 case), and early postoperative bleeding (1 case). According to the adapted classification of surgical complications of Clavien-Dindo (2004), these complications were regarded as complications of I, II and IIIb degrees, respectively.

The duration in hospital stay was, on average,  $4.0 \pm 0.3$  bed/days (range: 2–6 bed/days). The duration of removal of the drainage installed in the perinephral space was, on average,  $1.8 \pm 0.2$  days (range: 1–3 days).

Microscopic examination of a removed tumor revealed ccRCC in 16 (53.3%) cases, chRCC in 5 (16.6%), pRCC in 3 (10.0%), angiomyolipoma in 3 (10.0%), metanephric adenoma in 1 (3.3%), multicameral mucinar cyst – in 1 (3.3%) and suppurating cystic formation – in 1 (3.3%) case. According to the degree of malignancy, RCC in 9 (37.5%) cases was G1, in 11 (45.8%) – G2, in 3 (12.5%) – G3, in 1 (3.3%) case – G4. According to the results of histological findings, the surgical margin was negative in 19 (79.2%) cases, positive in 5 (20.8%).

During the dynamic monitoring of the patients after operation, the signs of local or metastatic relapse were not detected yet.

**Conclusion:** Laparoscopic partial resection seems to be an effective, safe and oncologically substantiated surgical method for treating a kidney tumor in stages T1-T2. The low level of perioperative complications and the inherent advantage of laparoscopic visualization make the partial resection very attractive.

#### GUA-20 Initial experience of laparoscopic operations in urology in Khorezm region

H. R. Giyasov<sup>1</sup>, R. F. Fattaev<sup>1</sup>, Sh. T. Mukhtarov<sup>2</sup>, B. A. Ayubov<sup>2</sup>, Dj. A. Nazarov<sup>2</sup>

<sup>1</sup>Khorezm Branch of the Republican Specialized Scientific and Practical Medical Center of Urology, Urgench; <sup>2</sup>Republican Specialized Scientific-Practical Medical Center of Urology, Tashkent

**Background:** For many years, the only method of operative treating of urological patients was open surgical interventions, the significant trauma of which led to a long rehabilitation period. In the last decades, the laparoscopic surgical method has begun to be used for these diseases, which allows a different look at the problem of treating such patients. This method creates an alternative to open surgery, which makes it possible to perform radical treatment with minimal invasiveness.

**Materials and methods:** From October 2017 to August 2019, in the Khorezm branch of the Republican Specialized Scientific and Practical Medical Center of Urology, 50 patients underwent laparoscopic

surgery, of which 21 were men and 29 were women, aged 17 to 60 years.

**Results:** By the nature of laparoscopic operations, the patients were divided as follows: renal cystectomy was performed in 14 (28%) patients; ureterolithotomy in 2 (4%) patients, pyeloplasty in 10 (20%) patients, 2 (4%) of them were performed ureterolysis; Ureterocystoanastomosis in 1 (2%) patient, nephrectomy in 20 (40%) patients. Thirteen (26%) patients received transperitoneal access using, in most cases, three trocars, and the remaining 37 (74%) patients received retroperitoneoscopic approach. Blood loss during all operations ranged from 10 to 150 ml. The general condition of the patients one day after the operation was satisfactory and they were active on the second day. Drainages were removed for 2–3 days. Patients were discharged after excision of kidney cysts, ureterolithotomy and nephrectomy on days 4–5, after pyeloplasty – on days 6–7. In patients under observation from 3 months to 1 year, early and late complications were not observed.

**Conclusion:** Performing laparoscopic operations in urological patients is a modern promising minimally invasive surgical intervention, which allows to eliminate pathology in a short period of hospital stay and quickly restore working capacity and significantly improve the quality of life.

#### GUA-21 Results of totally tubeless percutaneous nephrolithotomy in patients with existing nephrostomy tube

F. R. Nasirov, Sh. T. Mukhtarov, Yo. U. Safaev, A. A. Kayumov  
Republican Specialized Scientific-Practical Medical Center of Urology, Tashkent, Uzbekistan

**Background:** Percutaneous nephrolithotomy (PNL) is the effective method of surgical treatment for renal stones >2 cm. Standard PNL technique includes nephrostomy tube placement at the end of the procedure. One of the modifications of PNL is totally tubeless PNL, which has been promoted by Bellman in 1997, and significantly reduces patient's hospital stay duration.

**Objective:** The purpose of our study was to evaluate of the dependence of results of totally tubeless PNL on existence of pre-installed nephrostomy tube.

**Materials and methods:** From 2010 to 2017, in the Republican specialized scientific-practical medical center of urology (Tashkent, Uzbekistan), 136 patients underwent a totally tubeless PNL on upper urinary tract stones. 24 of them (group 1), previously underwent percutaneous nephrostomy tube placement according to indications. For remaining 112 patients (group 2), access to the kidney was performed during procedure using Mannheim technique. Stone disintegration was performed with ultrasonic and ballistic lithotripsy. At the end of the procedure the guidewire was left in place for the 3–5 minutes for checking the signs of the active bleeding. If there were clear urine, the ureteral catheter and guidewire were removed.

All procedures were performed without significant complications. The operation time, hospital stay and analgesia requirements were compared in the two groups.

Statistical analysis was performed using IBM SPSS Statistics v 21. The Shapiro-Wilk test was used to assess compliance with the normal distribution of data. Comparative differences were considered statistically significant, with p values <0.05.

**Results:** The mean stone size in group 1 and 2 was  $24.8 \pm 2.65$  mm and  $26.6 \pm 1.09$  mm respectively, there was no statistically significant difference between the groups ( $t = 0.66$ ,  $p > 0.05$ ). The operation time in group 1 was significantly less ( $t = 2.28$ ,  $p < 0.05$ ) than in group 2 ( $50.7 \pm 3.16$  min and  $59.9 \pm 1.67$  min, respectively). The average hospital stay duration in group 1 was less ( $t = 2.09$ ,  $p < 0.05$ ) than in group 2 ( $2.8 \pm 0.20$  days and  $3.6 \pm 0.16$  days, respectively). The analgesia