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 ± 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 ± 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 ± 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 postoperative 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 ± 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 ± 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[1], R. F. Fattaev[1], Sh. T. Mukhtarov[2], B. A. Ayubov[2], Dj. A. Nazarov[2]
[1]Khorezm Branch of the Republican Specialized Scientific and Practical Medical Center of Urology, Urgench; [2]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; Ureterocystoanastamosis 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 preinstalled 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 ± 2.65 mm and 26.6 ± 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 ± 3.16 min and 59.9 ± 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 ± 0.20 days and 3.6 ± 0.16 days, respectively). The analgesia

requirements (in terms of equivalent of the diclofenac), in group 1 was less (t = 2.31, p < 0.05) than in group 2 (121.6 ± 19.13 mg and 198.2 ± 14.30 mg respectively).
Conclusion: Totally tubeless PNL in patients with existing nephrostomy tube shows reliably better operation time, hospital stay duration and analgesia requirements. In this regard, to patients with an existing nephrostomy tube, as an alternative to the standard PNL, we can recommend totally tubeless PNL.

GUA-22 Results of primary TRUS prostate biopsy depending on PSA level and prostate mpMRI data

Sh. I. Giyasovl[1,2], M.Kh. Tukhtamishev[1]
[1]SI "Republican Specialized Scientific Practical Medical Center of Urology", RSSPMCU Tashkent, Uzbekistan; [2]Department of Urology, Tashkent Medical Academy

Background: In the success of treatment of prostate cancer, timely diagnosis of its localized form is very significant. In this issue, prostate biopsy plays a key role. However, a high percentage of negative results of the primary biopsy raises, many questions are standing to researchers regarding the improvement of indications for this invasive procedure.
Objective: To analyze the results of primary transrectal prostate biopsy, depending on the level of total PSA and mp-MRI data of the prostate.
Material and methods: The analysis of the results of 217 primary multifocal biopsies of the prostate performed according to medical indications, according to negotiability of patients to RSSPMCU in the period 2016–2019y. Of these, 203 patients underwent a primary biopsy at once, 14 patients after performing a multiparametric MRI of the prostate on a Philips Ingenia 1.5 Tesla machine with an assessment PIRADS-v2 scale (Prostate imaging reporting and data system).
The average age of patients was 68.94 ± 0.54 (years), the volume of the prostate gland (gland + adenoma) was 72.69 ± 2.13 (cc), while the average level of total PSA in serum was 29.27 ± 0.08 (ng/ml). Preparing patients for biopsy included: discontinuation of antiplatelet drugs before 7 days, the start of ciprofloxacin administration 500 mg × 2 times a day before the procedure. The material for the study was taken TRUS guided, under local anesthesia, by using a BIP-high speed multi biopsy gun, biopsy needle 18–20 g × 20 cm, tissue took from 10 sites of the prostate gland, with coverage of the peripheral and apical zones. In 14 patients whom performed preoperatively mp-MRI, besides standard 10 shots performed additional 4 to 6 shots from suspicious zone.
Results: Out of 203 primary biopsies, adenocarcinoma was verified in 145 (71.4%) patients, whose prostate volume was 74.08 ± 2.12 (cc), in 58 (28.6%) – BPH, volume 68.73 ± 2.14 (cc), Table 1.

Table 1
Results of primary prostate biopsy from the level of total PSA (n = 203)

PSA level, (ng/ml),	Total number of patients, n,	Number of adenocarcinomas detected (%)	Number of patients with G1–2 (% of identified)	Number of patients with G3-4 (% of identified)
5–10	17	2 (11.2)	–	2 (100)
11–20	52	30 (57.7)	13 (43.3)	17 (56.7)
21–30	47	36 (76.6)	7 (19.4)	29 (80.6)
31–40	41	37 (90.2)	7 (18.9)	30 (81.1)
41–50	25	22 (88.0)	2 (9.1)	20 (90.1)
51–60	11	9 (81.8)	1 (11.1)	8 (88.9)
61–100	10	9 (90.0)	–	9 (100)

Analysis of morphological study results of the prostate biopsies, depending on the level of total PSA showed that with PSA levels of 5–10 ng/ml, 88.8% had a negative result, 5–20 ng/ml had 53.6%, 5–30 ng/ml – 42.5%.
Given the high negative result of primary biopsy in patients with PSA level up to 30 ng/ml, 14 patients who did not suspect c-r according to DRE and TRUS, performed m-p MRI of the prostate (8 of them with a PSA level of 5–20 ng/ml, 2 of 21–30 ng/ml and 4 of them 31 ng/ml and above), followed by performing a primary biopsy.
In 4 patients with total PSA levels above 31 ng/ml, adenocarcinoma was detected (100%); in 2 patients with PSA level of 21–30 ng/ml (PIRADS 2, PIRADS 3) – revealed BPH; of 8 patients with PSA levels of 5–20 ng/ml in 1 (12.5%) revealed a neuro-endocrine adenocarcinoma (with a total PSA level of 5.92 ng/ml, mp-MRI was rated according to the PIRADS 5 scale). Of 9 (90.0%) patients with a PSA level of 5–30 ng/ml, whom BPH was detected (mean PSA was 17.80 ± 1.40, prostatic volume of 73.8 ± 11.8, according to mpMRI PIRADS 2 – was in 4, PIRADS 3 – in 5 patients), 5 patients underwent TURP. A postoperatively histological examination confirmed the BPH.
Conclusions: Thus, after the primary transrectal biopsy of the prostate among patients with a total PSA level of up to 10 ng/ml, adenocarcinoma was detected in 2 (11.8%), with a PSA level above 11 ng/ml in 143 (76.9%). Of the 145 patients who had verified prostatic adenocarcinoma, the patients were 61–70 years old, of them G1-2 were diagnosed in 30 (20.7%) and G3-4 in 115 (79.3%). Of the 10 patients with a PSA level of 5–30 ng/ml, 9 (90%) with points on the PIRADS grade (2 and 3) had BPH. In our opinion, the main question which patients after mp-MRI may not perform a biopsy remains open.

GUA-23 Effect of 5-α reductase inhibitors on the results of transuretral resection of benign prostate hyperplasia

Sh. I. Giyasov[1,2], J. M. Yuldashev[1], M. Kh. Tukhtamishev[1], J. S. Saitkulo[2]
[1]Republican Specialized Scientific and Practical Medical Center of Urology (RSSPMCU), Tashkent, Uzbekistan; [2]Department of Urology, Tashkent Medical Academy

Objective: Comparative evaluation of the results of the TUR of BPH in patients who have taken the alpha blockers for a long time with patients who took alpha blockers and finasteride 5 mg/day for more than 1 year.
Material and methods: This study included 120 patients who was underwent monopolar TUR of BPH. We carried out a prospective analysis of the results and the patients were divided into two groups. In 1st group we included 80 patients who in anamnesis had not receive treatment for BPH or for various periods received standard therapy with alpha adrenergic blockers. The average age was 67.8 ± 4.06. The 2nd group included 40 patients who, in addition to alpha adrenergic blockers, took finasteride at 5 mg/day for more than 12 months, whose age was 68.6 ± 1.44 (P > 0.05). The volume of the prostate in patients with the 1st group was 57.8 ± 2.19 cm^3, in the 2nd – 58.2 ± 2.34, P > 0.05. All patients were performed monopolar TUR of BPH according to standard procedure under spinal anesthesia.
Results: The time of resection and the duration of intervention in patients of the first and second groups was 54.5 ± 1.30 and 41.2 ± 1.37 (min) respectively, P < 0.05. The volume of intraoperative blood loss in groups of patients was 269.9 ± 10.17 (ml) and 262.3 ± 12.37 (ml), P > 0.05.
In the postoperative period, among patients of the 1st group, only 38 (47.5%) complications were observed (TUR syndrome in 2, postoperative intensive staining of urine with blood in 23 (6 of them had repeated coagulation of bleeding vessels), complicated UTI was observed in 9, in 2 developed a urethral stricture, 2 had a bladder neck stricture). Among patients of the 2nd group, only 9 (22.5%) complications were observed (in 5 – hematuria, in 4 – complicated UTI), P < 0.01.