

Conclusion: Bipolar enucleation is an effective surgical management of BPH. It allows enucleation of large adenomas in a single sitting, mimicking conventional open enucleation of the prostate while having all the advantages of a minimally invasive surgery. Mushroom technique is more time consuming than morcellation, but feasible in case of absence of equipment.

GUA-03 Percutaneous nephrolithotomy in Galdakao-modified supine Valdivia position in comparison to prone position: our initial experience

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Background: Despite the fact that it is almost two decades since the description of supine percutaneous nephrolithotomy (PCNL) technique, it is still underutilized. Aim of this study was to compare retrospectively the safety, efficacy, and complications of percutaneous nephrolithotomy in Galdakao-modified supine Valdivia position vs prone position.

Patients and methods: The study included all patients who underwent PCNL from June 2018 to January 2019. 41 procedures were performed in supine and 22 in prone position. All kidney punctures were performed by urologist under ultrasound control. Length of stay, OR time, complication rate, rate of transfusion and stone free rates were compared.

Results: Both the groups were comparable regarding the male/female ratio, stone size, and site. No significant differences were found in terms of the stone-free rate (84% and 82%), blood transfusion rate (no blood transfusion) and complication rates (1% and 1%). Significant difference was reported in mean operative time between supine and prone positions (84 and 115 minutes, respectively). Mean hospital stay was similar for both groups.

Conclusions: PCNL in both positions was equally successful with no significant differences in stone free rate and complications. PCNL in Galdakao-modified supine Valdivia position was superior to PCNL in the prone position regarding operative time. As rotating the patient to prone position increases some anesthesiologic risks, supine is also more comfortable for anesthesiologists.

GUA-04 Our treatment experience in urolithiasis

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Background: Urolithiasis has a high medical and social significance, which is due to a fairly high incidence rate, reaching 10% in the world and its annual growth in many countries. In recent decades, indisputable progress has been made in the development of high-tech instrumental and operational methods for removing urinary stones. The introduction of Extracorporeal Shock Wave Lithotripsy, percutaneous, pro-urethral nefroureterolithotripsy and lithoextraction into clinical practice has once again significantly changed the approach to treatment of ICD. Since January 2017, Laser lithotripsy of urinary stones has been performed in City Hospital N1 of Karaganda.

Purpose: To assess the quantity and quality of laser lithotripsy in urolithiasis on the basis of the City Hospital №1 of the city of Karaganda.

Materials and methods: A retrospective analysis of inpatient cards of patients in the surgical ward of hospital No. 1 from January 2017 to

May 2019 was conducted. An Olympus 70 6.4/7.8Fr ureteroscope and a DMHSolvo holmium laser lithotripter were used.

Results and discussion: According to the data we received from January 2017 to May 2019, the number of operated patients was 646, of which males made up (64%), females (36%). Age groups: from 18 to 59 years old (73%), 60–69 years old (17%) and over 70 years old (10%). According to the localization of calculi in the urinary system in 92% of the patients, the stones were in the ureter and only in 8% of the patients in the bladder. By localization of calculus in the ureter: in 77% the stone was in the lower third of the ureter, in the middle third of the ureter in 14%, in the lower third of the ureter in 9% of patients. The operation was performed under spinal anesthesia. The average duration is 45 minutes. In 90% of patients, the operation ended with the installation of a ureteral stent 5–6Fr for a period of 2 weeks to 4 weeks. In the postoperative period, a Foley catheter was placed in the bladder for 1 day (until the patient was activated). All patients underwent surgery satisfactorily. In the postoperative period, such complications as exacerbation of pyelonephritis were observed in 5 patients, which was resolved by conservative measures. In 30 patients, on the background of ureteral stenting, pain syndrome was observed, which was stopped in 15 patients with non-narcotic analgesics, in 3 patients, severe pain syndrome was not stopped by narcotic analgesics, which required removal of the stent; also in 5 patients it was necessary to remove the stent in connection with severe dysuria and signs of gross hematuria. After surgery, patients were discharged from the hospital for 4–7 days.

Conclusions: The use of laser lithotripsy with stones in the ureter showed high efficiency and small invasiveness. The method allows to reduce the timing of the patient's stay in the hospital and reduce the number of postoperative complications.

GUA-05 Antegrade revascularization of the penis with retroperitoneoscopic artery fence

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Background: Despite a variety of methods of correction of erectile dysfunction, today the only method meeting criterion of physiology is the penis revascularization. The modern methods of revascularization of a penis based both on the principle arterio-arterial and on the principle of an arteriovenous anastomosis, are united by the general source of additional perfusion – the lower epigastric artery which owing to the anatomo-physiological features is an ideal donor vessel. We present a new method of arterio-venous anastomosis with retroperitoneoscopic method of artery intake. In addition, the risk of developing one of the main complications, anastomotic thrombosis, is reduced.

Objective: To estimate short-term results of revascularization of a penis with a retroperitoneoscopy harvesting of an artery and imposing of an antegrade anastomosis between the lower epigastric artery and a deep dorsal vein.

Materials and methods: On the basis of State Research Center A.I. Burnasyan Federal Medical Biophysical Center 14 patients with vasculogen erectile dysfunction during the period from 2018 to 2019 were operated.

Patients were uniform in clinical laboratory data and on age (middle age at patients 33 years (22–35 years), according to a penile ultrasonography with doppler at 10 patients is revealed only the ED arterial component, 5 patients have a mixed form of vasculogen erectile dysfunction. Operations it was carried out by the technique developed by us. The Retroperitoneoscopy stage of allocation of the

lower epigastric artery was performed in one stage with a stage of allocation of vessels on a penis. All patients in the postoperative period accepted PDE-5 inhibitor in small doses.

In the postoperative period studied frequency intra- and postoperative complications, duration of stay of the patient in a hospital, rehabilitation terms.

Results: Duration of operation of 84.3 (63–110) min. Intraoperatively and early postoperative complications at the studied patients it was not registered, in all cases anastomosis functioned “adequately”, for 1 day spontaneous adequate erections at 9 patients, at 6 patients for the 2nd day were noted. Patients were written out on average for the 5th day. Restriction of physical activities, sports activities at patients – 14 days. During observation, at the operated patients, cases of a recurrence of ED were not recorded.

Conclusions: When carrying out revascularization the method offered by us, at patients notes reduction of terms of an operative measure, due to simultaneous work of two teams of surgeons, rehabilitation term without loss of efficiency of intervention, the minimum cosmetic defect decreases. Also due to antegrade imposing of an anastomosis, fibriniferments of an anastomosis it was not recorded.

GUA-06 New approach to preserve male sexual function after nerve-sparing radical prostatectomy

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Introduction and Objectives: Radical prostatectomy (RP) is a standard surgical treatment for localized prostate cancer. RP is followed by some complications, including erectile dysfunction, reduction in penis length (PL) and penile curvature. Recovering sexual function after RP has been extensively studied. Previous studies have demonstrated positive effect of phosphodiesterase type 5 inhibitor (PDE5-Is) on erectile function in men after RP. Several trials have shown the effectiveness of using of penile extender (PE) to maintain the penis length. The aim of our study is to compare the effect of PDE5-Is, PE and combined treatment (PDE5-Is with PE) on erectile function and PL in men after RP.

Materials and Methods: The study included 80 men who underwent RP. The mean age was 64.6 ± 4.7 years. All of them were interested in preserving sexual function postoperatively. The patients were randomized into 4 groups (Gr): 1 – control – 20 men – did not get any therapy; 2–20 men – were treated by PDE5-Is only; 3–20 men – used PE with the vacuum balanus fixation; group 4–20 patients received combined treatment – PDE5-Is with PE. Therapy continued 3 months after surgery. Symptom score assessment with IIEF-5 and PL measurement were performed before and on the 7, 30 and 90 days postoperatively.

Results: PL measurement showed the average penile shortening 0.7 ± 0.1 cm in 7 days, 0.9 ± 0.1 cm in 30 days, and 1.6 ± 0.1 cm (12.5%) in 3 months after surgery in group 1. The mean penile shortening was 0.7 ± 0.1 cm in 7 days, 1.1 ± 0.1 cm in 30 days and 1.2 ± 0.1 cm (10.3%) in 3 months in group 2 ($p < 0.05$). In group 3 penile shortening was 0.8 ± 0.1 cm in 7 days, followed by penile elongation by 0.2 ± 0.1 cm in 30 days and 0.8 ± 0.1 cm (5.7%) in 3 months ($p < 0.05$). In group 4 the mean shortening was 0.7 ± 0.1 cm in 7 days; elongation 0.2 ± 0.1 cm and 0.7 ± 0.1 cm (6%) in 30 and 90 days, respectively. Despite the difference in the mean increase of PL in the groups 3 and 4, statistical significance was not determined. The mean score of IIEF-5 was 16.5 ± 1.3 before surgery, decreased to 9.7 ± 1.4 to 7 day and increased to 10.1 ± 1.5 and 10.3 ± 1.4 to 30 and 90 days, respectively in group 1. In

group 2 IIEF-5 was 16.5 ± 1.3 before surgery, decreased to 9.7 ± 1.4 to 7 day and increased to 13.2 ± 1.6 and 13.4 ± 1.2 to 30 and 90 days, respectively. There was no obtained significant difference between group 3 and control group for IIEF-5 score, as well as between groups 2 and 4.

Conclusions: The effect of combine treatment (PDE5-Is with PE) is superior to the effect of both monotherapy PDE5-Is or PE on erectile function and PL after RP. It is reliable tool of sexual rehabilitation after RP.

GUA-07 Intravesical bacteriophages for treating urinary tract infections in patients undergoing transurethral resection of the prostate: a randomized, placebo-controlled, double-blind clinical trial

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Background: Urinary tract infections (UTIs) are among the most prevalent microbial diseases and their financial burden on the society is substantial. Moreover, the continuing increase of antibiotic resistance worldwide is alarming. Thus, well-tolerated, highly effective therapeutic alternatives are urgently needed. We aimed to compare efficacy and safety of intravesical bacteriophages for treating UTIs.

Methods: In this randomized, placebo-controlled, double-blind trial, 97 patients undergoing transurethral resection of the prostate presenting with UTI were assigned to receive intravesical Pyo bacteriophage ($n = 28$), intravesical placebo solution ($n = 32$), or oral antibiotic treatment ($n = 37$). The primary outcome of the trial was clinical and microbiological treatment response. Secondary outcomes included safety parameters, quantitative microbiological urine assessments and improvement or deterioration of UTI symptoms.

Results: Seven days after surgery, the treatment success rates were similar between the three groups. Compared to the Pyo bacteriophage (5/28 (18%)), the placebo group had 9/32 (28%) (Odds Ratio (OR) 1.8, 95% confidence interval (CI) 0.52–6.2; $p = 0.352$) and the antibiotic group had 13/37 (35%) (OR 2.49, 95% CI 0.77–8.1; $p = 0.129$) successes. Also, adverse events were similar between the three groups. They were seen in 6/28 patients (21%) in the Pyo bacteriophage but in 13/32 (41%) in the placebo group (OR 0.4, 95% CI 0.13–1.25; $p = 0.116$) and in 11/37 (30%) in the antibiotic group (OR 0.65, 95% CI 0.21–2.03; $p = 0.452$).

Interpretation: Management of UTI in patients undergoing transurethral resection of the prostate is similarly successful irrespective of the treatment chosen. Besides antibiotics, bacteriophages and bladder irrigation appear to have specific beneficial effect on UTI control.

GUA-08 375-miRNA expression and neoadjuvant therapy in high risk prostate cancer

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