

The 8<sup>th</sup> International Medical Congress for Students and Young Doctors

**Materials and methods.** We performed a PubMed and science direct database to distinguish reviews, original articles and metaanalysis using the search words “fluid intake in renal colic” and “ureteric stone”. We also reviewed national and international guidelines as European Association of Urology (EAU), the Cochrane Collaboration (two studies Edna 1983 and Springhart 2006) and clinical evidence databases.

**Results.** During the research, we revealed that: on the one hand in the Cochrane studies where compared the use of high-volume fluid therapy, diuretics with minimal or no fluids and obtained that hydrotherapy has not been shown to improve pain control, stimulate ureteral stone passage, or necessary of surgical stone removal. On the other hand leading to high intrarenal pressure may occur complications such as rupture of ureteral wall or renal impairment, forniceal tears and perirenal collections. In according to EAU and Urology practice conservative management in patient who have initial presentation for episode of acute ureteric colic and single non- obstructive calculus situate distal to renal calyx is pain control, hydration and anti-emetics. If diagnosis confirmed with non-contrasted computed tomography (NCCT sensitivity 94-100% and specificity 92-100%), intravenous pyelogram (51-87% and 92-100% respectively) and doppler ultrasound, urography (sensitivity of 44-77% and specificity of 80-87%) Other reviews and articles are advised intake small amounts of fluids at frequent intervals. Patient is recommended enough oral fluids to produce 2.5 liters of urine; with probability of spontaneous calculus clearance based on stone size, the rates were 76%, 60%, 48%, and 25% for 2-4 mm, 5-7 mm, 7-9 mm, and >9 mm diameters, respectively.

**Conclusions.** Based on the foregoing we can confirm forced intravenous hydrotherapy is a common practice, but unscientific, because delays calculus clearance. As well as have shown no benefits still may have significant side effects.

**Key words:** ureteral colic, fluid intake, urolithiasis

## 77. EARLY OUTCOMES OF TRANSURETHRAL THULIUM LASER VAPOENUCLEATION OF PROSTATE

Author: **Alexei Plesacov**

Co-authors: Ivan Vladanov, Artur Colta

Scientific adviser: Vitalii Ghicavii, PhD, Associate Professor, Department of Urology and Surgical Nephrology. *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Surgical treatment of large benign prostatic hyperplasia (BPH) remain an important problem in endourology. Open surgical procedures are still used to treat patients with BPH. Surgical trauma and numerous contraindications make it useless in many patients with comorbidities. A small number of endourologic procedures offer the possibility to treat large BPH. Thus, laser surgery seems to be a salvage treatment for patients with contrindications for classical open surgery.

**Aim of the study.** The efficiency assesment of transurethral Thulium YAG laser vapoenucleation of prostate (ThuVEP).

**Materials and methods.** 16 patients with average age of 71 years underwent surgical treatment of large BPH. All of them underwent ThuVEP. A 550 micron end fire laser fiber was used during vapoenucleation. 80W power setings were used in all of the patients. The period of surveillance was of 6 months. Preoperative investigations: PSA, IPSS, QoL, TRUS-P with

PVR and Qmax. Patients inclusion criteria: Prostate Volume  $\geq 80\text{cm}^3$ , IPSS  $\geq 16$  and PVR  $\geq 50\text{ml}$ , PSA  $\leq 4\text{ng/ml}$ , QoL  $> 4$ .

**Results.** Average duration of intervention: 76 min. The prostate volume decreased postoperative on average from  $83,2\text{ cm}^3$  to  $35,4\text{ cm}^3$ , there was an increase of average Qmax from 8,2 to 19.3 ml/s, a decrease in mean IPSS from 21,3 to 7,1, and PVR diminished from 69,1 ml to 16,1 ml. The period of transitional macrohematuria was 2,1 days. The duration of cateterization was 2,5 and mean hemoglobin drop was 2,1 g/l.

**Conclusions.** ThuVEP is an effective method for endourologic treatment of large BPH. Immediate postoperative results of ThuVEP are promising. It is to mention a high haemorrhage safe features of ThuVEP.

**Key words:** Thulium: YAG laser, vapoenucleation, prostate

## 78. EFFICIENCY OF USING COMBINATIONAL DRUGS IN TREATMENT OF URINARY LITHIASIS

Author: **Vladislav Vasiliev**

Scientific adviser: Banov Pavel, MD, PhD, University Assistant, Department of Urology and Surgical Nephrology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Urinary lithiasis is a major global health problem with a prevalence of 2-3% of general population and a lifetime recurrence rate about of 50%. In the Republic of Moldova, 10% of the whole population suffer from this disease. The surgical treatment of urolithiasis is making conditions for improving urodynamics and reducing inflammatory process. Taking into consideration the high recurrence of urolithiasis, patients suffering from this disease need adequate and long-term treatment. Thus, safe and effective nonmedicinal prevention strategies are needed.

**Aim of the study.** Evaluation of the efficacy of the combination drugs in treatment of urolithiasis after extracorporeal shock wave lithotripsy, ureteroscopy, percutaneous nephrolithotomy in removing of the restant fragments

**Materials and methods..** The research included 60 consecutive cases of the urolithiasis treated during 01 february2019-31 mai 2019. The study was effectuated in the Department of urology and surgical nephrology of the State University of Medicine and Pharmacy "Nicolae Testemitanu", within the Republican Clinical Hospital "Timofei Moşneaga". Patients were randomly divided in two groups. Group I(group of study) included 30 patients who administrated the combination drugs(citrate, magnesium, pirodoxin). Group II(control group) included 30 patients who took only general recommendations like adequate hydration, diet, limited caffeine etc.

**Results.** The average age of the patients with urolithiasis was  $47,17\pm 14$  years. In the Group I before administration of combinational drugs urine pH level was  $6,2\pm 0,8$ , after administration  $7,1\pm 0,3$ . The level of magnesium was increased: before administration  $3,1\pm 1,57$  after  $,9\pm 2,2$  mmol/24h. The obtained results confirm increase of daily diuresis  $2275\pm 257$  ml vs  $1580\pm 321$  ml;  $p < 0,05$ . The presence of renal colic during the expulsion of disintegrated fragments in  $1,8\pm 0,3$  cases was in the Group I and in  $6,7\pm 0,8$  in the Group II. In the group of study the VAS score was 4 points, in comparison 7 points in control group.