

hypotheses currently being considered include myogenic and neurogenic dysfunction that involves a specific dysfunction of the autonomic nervous system.

**Aim of the study.** To determine what are the different methods used in evidence for autonomic nervous system (ANS) dysfunction in females with iOAB.

**Materials and methods..** This study is a systematic review of data of publications of the last 10 years on the selected theme using PubMed system. According to a key phrase “autonomic nervous system in overactive bladder”, “evaluation of idiopathic overactive bladder” 90 publications were found, 32 publications were selected and analysed. Research includes data from 15 publications.

**Results.** The OAB symptom score, which goes from 0 to 15, is subjective and has limitations, and urodynamic investigations can be invasive and are time consuming. Here is a need for a reliable, objective, and non-invasive methods of measuring the activity of the nerve fibres that control the urge to urinate and urination. Autonomic dysfunction in the genital area can be assessed using sympathetic skin response (SSR). The absence of SSR may be a sign of autonomic dysfunction and also of iOAB. SSR tests can be used for the detection of early iOAB and assessing those likely to be refractory to anticholinergic drugs in iOAB. Autonomic cardiovascular testing in females are associated with iOAB without detrusor overactivity, and “sensory urgency” could be related to a sympathetic dysfunction. Measuring the heart rate variability (HRV) provides a non-invasive approach to detecting autonomic imbalances. The reductions of HRV values in patients with iOAB suggest that the autonomic nervous system is altered and may be a factor in disturbed bladder function. Was demonstrated that deep respiration heart rate variations increased in patients with iOAB. These results reflect parasympathetic hyperactivity. Functional studies such as pupillometry would be helpful for understanding the iOAB and serve as an aid to the development of therapeutic options.

**Conclusions.** The researches presented in this review strongly support that dysfunction in the ANS balance could be involved in the pathophysiology of iOAB and further using the diagnostic methods to monitor treatment response and apply them to pharmacological or surgical treatment. And because of their non-invasiveness, these methods can also be used in children.

**Key words:** autonomic nervous system, idiopathic overactive bladder, women.

## **90. TRANSURETHRAL THULIUM LASER VAPOENUCLEATION OF PROSTATE – A GOOD ALTERNATIVE FOR OPEN SURGERY**

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**Introduction.** Treatment of huge benign prostatic hyperplasia (BPH) consists an actual problem for urological community. Nowadays, open surgery is one of the basic surgical methods in treatment of large BPH, but it is less used due to the modern laser techniques. Spreading of laser surgery offers some new opportunities for its treatment. Safety of Thulium:YAG laser in transurethral vapoenucleation of the prostate in combination with its efficiency assure a good alternative for classic open surgery in BPH treatment.

**Aim of the study.** Comparative assessment of the efficacy of transurethral Thulium:YAG laser vapoenucleation of prostate (ThuVEP).

**Materials and methods.** 37 patients with average age of 67 years underwent surgical treatment of large BPH at the Department of urology and surgical nephrology, State University of Medicine and Pharmacy "Nicolae Testemițanu". Patients were divided into two treatment groups: ThuVEP (17 patients) and open simple prostatectomy (Fuller-Freyer procedure) (20 patients) and evaluated postoperatively at 3 months. Hemoglobin drop was also evaluated at the first postoperative day.

Preoperative patients were investigated: 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  $> 4$ , Qmax  $< 8\text{ml/s}$ .

**Results.** Average duration of intervention: 79 min vs 63 min. The prostate volume decreased postoperative on average from  $82,2\text{ cm}^3$  to  $31,3\text{ cm}^3$  vs  $83,4\text{ cm}^3$  to  $31,9\text{ cm}^3$ , there was an increase of average  $Q_{\text{max}}$  from 8,2 to 20.3 ml / s vs 8,4 to 21,1 ml / s, and a decrease in mean IPSS from 19,3 to 5,3 vs 20,1 to 5,4, and PVR diminished from 67.2 ml to 15,4 ml versus 68,1 to 17,4 ml, respectively. The period of transitional macrohematuria was 2,1 days vs 5,3 days respectively. The duration of cateterization was 2,3 days in the first group and 8,3 days in the second group. Mean hemoglobin drop was 2,1g/l in Group 1 vs 3,4g/l in Group 2.

**Conclusions.** ThuVEP is an effective alternative method in the treatment of large BPH. Immediate postoperative results of ThuVEP are similar to the results in open simple prostatectomy (Fuller-Freyer procedure). It is to mention a high safety profile characteristic for ThuVEP and a reduced hemoglobin drop comparatively to classic open surgery.

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

## DEPARTMENT OF SURGICAL ONCOLOGY

### 91. ETIOPATHOGENICITY AND DIAGNOSIS OF ENDOMETRIAL OVARIAN TUMORS

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**Introduction.** Endometriosis is a benign gynecological estrogen-dependent disease characterized by endometrium-like tissue outside the uterus. The disease affects approx. 6-10% of women of reproductive age. The benign endometrial tumor also known as "chocolate cyst" affects 17-44% of women with endometriosis. Etiological theories explaining the endometrial lesions are: reflux of endometrial tissue via fallopian tubes during menstruation, coelomic metaplasia, vestiges of embryonic cells and lymphatic and vascular proliferation. The golden standard in diagnosis of endometrial tumors is laparoscopy. Transvaginal ultrasound does not help in initial diagnosis, but nonetheless can help in telling apart the endometrial from other benign ovarian tumors, while MRI helps in differentiating endometrial ovarian tumors from other ovarian cysts.

**Aim of the study.** Evaluation of risk factors and methods of diagnosis of endometrial ovarian tumors.