

29. ENDOSCOPIC TREATMENT WITH HO:YAG LASER AT THE PATIENTS WITH CHRONIC LITHIASIS NONBACTERIAL PROSTATITIS.

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Introduction. Prostate lithiasis is among the final stages of the chronic inflammatory process of the prostate (chronic prostatitis). This stage is usually characterized by a decreased activity of the inflammatory process. In some patients, prostate lithiasis might cause bladder outlet obstruction. The treatment of prostate lithiasis is a significant issue of modern urology since it is widely occurring especially in older and senile men.

Aim of study. The aim of the study is to determine the endourological treatment by application of laser method (Ho:YAG) for after bladder obstruction caused by the consequence of chronic lithiasis nonbacterial prostatitis.

Methods and materials. In the study were included 30 patients, consulted and treated in the urology department of the PMI Republican Clinical Hospital “Timofei Moșneaga”- the clinical base of the Department of Urology and Surgical Nephrology of the State University of Medicine and Pharmacy “*Nicolae Testemitanu*”. For 30 patients diagnosed with prostate stones, a consequence of nonbacterial CP, with difficult micturition (after bladder obstruction), with symptoms of urinary disorders or pelvic pain for at least 3 months, during 6 months, requiring as a treatment method endoscopic surgery. Transurethral resection as a method of treatment, was performed by the Ho:YAG 2.0 m laser, the operating mode with a pulsating energy of 2.3 J and a frequency of 8 Hz, the maximum irradiation power was 18.4 W. The laser incisions were made at 5 and 7 o'clock of the conventional quadrant with the resection of the tissue with fibrosis with local lithiasis. In order for objective assessment of surgery treatment on the clinical efficiency, changes in patient symptoms (IPSS score, quality of life index - QoL) and objective parameters (maximum urine flow rate (Qmax), residual urine volume, and preoperative prostate volume (TRUS-P) at 1, 3 and 12 months after surgical treatment.

Results. The average duration of the surgery was 69 min., the duration of the laser enucleation of the fibrosis tissue was 48 min., the duration of the fragmentation of the enucleated tissue was 18.3 min. During the 12 months of surveillance, it was established that the mean IPSS value significantly improved from 23.2 ± 2.57 points at the beginning of the research to 8.57 ± 0.48 points after the intervention. The median quality of life (QoL) parameter also changed from 4.83 ± 0.51 points to 1.5 ± 0.14 points. The maximum urinary flow speed (Qmax) improved from 9.08 ± 1.8 ml / s before surgery to 19.93 ± 0.06 ml / s after surgery. The average value of residual urine decreased considerably after surgery (94.8 ± 47.4 ml versus 15.25 ± 9.6 ml). The frequency of Ho:YAG laser postoperative complications was generally low. The following complications were found intraoperatively: perforation of the prostate capsule - 1 case, damage to the walls of the bladder neck during fragmentation of tissue - 1 case, hemorrhage - 1 case, damage to the urethral opening - 1 case, incomplete perforation of the bladder in the triangle area - 2 patients. Among the postoperative complications, in one case was orchiepididymitis. Urethral stricture was 1.6%, and sclerosis of the urinary bladder neck - 3.3%.

Conclusion. Ho:YAG laser enucleation of the prostate is an effective surgical method for treating BO caused by chronic lithiasis nonbacterial prostatitis, with significant restore of micturition and is accessible for all categories of patients. Advantages of this method of treatment are the small volume of intra- and postoperative blood loss, without the need for blood transfusions, and decreased the time of catheterization of urethra.