

**Embolization of the prostatic arteries in BPH patients is relatively safe and effective treatment and an alternative for surgical treatment in patients with high operating and anesthetic risk.**

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**Relevance.** Benign prostatic hyperplasia (BPH) is one of the most common diseases in older men age. In the course of the trial treatment of such pathology is impossible due to a number of objective reasons, such as age and severe concomitant diseases impossible surgical methods of treatment.

**Goal.** Evaluate the effectiveness and safety of a minimally invasive method embolization of the prostatic arteries (PAE) at large volumes Benign prostatic hyperplasia in patients with severe concomitant pathologies.

**Materials and methods.** From August 2012 to May 2018, the PAE completed

42 patients with BPH. Patients were included in this group with the operation was contraindicated or undesirable due to high surgical and anesthetic risks. The age of patients ranged from 58 up to 86 years, an average of 67 years. Patients had a severe competing pathology (cardiac ischemia, postinfarction cardiosclerosis, heart rhythm disturbances, arterial hypertension, diabetes mellitus, Acute disorders of cerebral circulation in the anamnesis). 62% of patients were overweight body. Attempts to endovascular occlusion of the arterial bed of the prostate were 89%. In three patients unsuccessful cannulation attempts related to age of the iliac arteries. 50-60 years, 2 patients (4.7%), 60-70 years - 19 of patients (45.2%), 70-80 years - 18 patients (42.8%), 80-90 years - 3 patients (7.1%). As an embolizing agent, microspheres of 300-500 microns. In 37 cases, a microcatheter technology (super selective embolization), microcatheters Embocath, Maerstro, Progreat. Complications in the postoperative course to us was avoided.

**Results.** Short-term results of treatment were evaluated by us on a common complaints of patients, assessment of symptoms of the lower urinary tract by scale of IPSS, reduction in prostate volume and the amount of residual urine. In the short-term period, 1 month after treatment, a positive dynamics of key indicators. The volume of the prostate, according to TRUS, before surgery an average of 86 mm<sup>3</sup>, and after surgery an average of 47 mm<sup>3</sup>

(54.7% from the original). According to ultrasound, the volume of residual urine before the intervention was from 120 to 315 ml, an average of 217.5 ml. In a control study in a month the volume of residual urine decreased to an average of 50 ml (60.7% of the baseline level). It should also be noted positive subjective feedback from patients improvement urodynamics, reducing the number of night calls to urination. Three patients were performed against a ackground of acute retention of urine. The operation was performed against a background of permanent catheterization. Have one of them in an early postoperative study independent urination. The other two need to perform an operation for the time of urine derivation - epicystostomy, independent urination in them was restored in 1 and 1,5 months. after the interference. The QoL quality of life index also has changed positively.

**Conclusion:** Embolization of the prostatic arteries is relatively safe and effective treatment for BPH and an alternative for surgical treatment in patients with high operating and anesthetic risk.