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EFFICIENCY OF PROSTATIC ARTERY EMBOLIZATION IN TREATMENT OF BENIGN PROSTATE HYPERTENSION

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ABSTRACT

One of the most common urological diseases in older men is benign prostatic hyperplasia. The prevalence of this disease increases significantly with age, so the incidence of BPH is 60% by the age of 60, and up to 80% by the age of 80. The aim of the study was to evaluate the efficacy and safety of EPA in the treatment of benign prostatic hyperplasia. Research results have shown that embolization of prostatic arteries is an effective minimally invasive method of treating benign prostatic hyperplasia.

Keywords: prostate gland, benign hyperplasia, prostatic artery embolization.

INTRODUCTION

Benign prostatic hyperplasia (BPH) is the proliferation of smooth muscle fibers and epithelial cells in the transient zone of the prostate gland. The prevalence of moderate to severe BPH is about 50% of men in their 60s and almost 90% in men 85. According to various studies, 90% of men aged 45 to 80 years to some extent suffer from symptoms of the lower urinary tract (LUTS) [1]. BPH can lead to complications such as acute urinary retention, renal failure, massive hematuria, bladder stones, urinary incontinence, and recurrent urinary tract infection (UTI) [4].

Modern medicine is able to offer the patient a variety of fairly effective treatment methods, the main of which remains conservative therapy. However, in cases where drug treatment is ineffective, the patient is shown to perform surgical treatment [7].

Today, the leading place in the surgical treatment of BPH is occupied by endoscopic surgery. Transurethral resection of the prostate (TURP) is the gold standard for surgical treatment of BPH. Nevertheless, despite many years of experience in performing, TURP can cause complications such as retrograde ejaculation, urinary incontinence, hematuria, urethral strictures, bladder neck

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sclerosis, etc., and cannot be performed in a patient with a high surgical and anesthetic risk. Both modern methods of laser transurethral surgery and other surgical techniques for treating BPH, such as retropubic and laparoscopic adenomectomy, have similar limitations. Often, it is impossible to perform a surgical aid to a patient due to a burdened somatic status; therefore, minimally invasive surgical methods for treating BPH, which reduce the amount of anesthetic aid, the duration of surgical treatment, and reduce postoperative complications, are of particular importance [3,4]. Minimally invasive surgical methods for the treatment of BPH, such as transurethral incision of the prostate, transurethral microwave therapy (TUMT), transurethral electrovaporization of the prostate (TUVP), transurethral needle ablation of the prostate, etc., are usually performed under general anesthesia and cannot always be performed on the patient. with severe concomitant diseases. Among the many minimally invasive surgical methods for treating BPH, attention is drawn to superselective embolization of the arteries of the prostate (embolization of the prostatic arteries; EPA), the main advantage of which is that it is performed under local anesthesia and can be used in the treatment of elderly patients with severe concomitant pathology [5.7].

In the context of an increase in life expectancy and an increase in the structure of BPH morbidity in elderly patients with aggravated somatic status, minimally invasive methods of surgical treatment are of particular importance.

Embolization of the arteries of the prostate is one of the most promising methods of minimally invasive treatment of BPH.

The aim of the study was to evaluate the efficacy and safety of EPA in the treatment of BPH.

METODOLOGY

The results of treatment of 53 patients who underwent EPA for BPH were analyzed. The average age of the patients was 73 years (range 62 to 83 years). The average volume of the prostate gland is 86 cm3 (from 67 to 105 cm3). Six patients had previously undergone trocar cystectomy for acute urinary retention. The effectiveness of treatment was assessed by the dynamics of the following indicators:

restoration of independent urination;

- IPSS (International Prostatic Symptom Scale);
- Qmax (uroflowmetry);
- the volume of the prostate and residual urine (ultrasound).

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Safety was assessed by the incidence and severity of postoperative complications.

RESULTS AND DISCUSSION

All patients noted positive dynamics in assessing the quality of urination. The epicystostomy drain was removed in all patients who had previously undergone trocarcystostomy within 3 days after EPA. In 5 (9%) patients, the EPA effect was

insufficient (spontaneous urination was restored, however, a large amount of residual urine remained), and therefore required a subsequent TUR of the prostate gland. 4 (8%) patients developed ischemia of the glans penis with superficial tissue necrosis. Against the background of conservative therapy, the complication was completely resolved. Prostatic symptoms according to the International Scale decreased after EPA from 25.3 to 10. The Qmax value increased from 8 to 15 ml / s. The mean prostate volume decreased from 86 to 56 cm3. The most pronounced effect was observed in relation to the residual urine volume.

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CONCLUSION

An urgent scientific task is the accumulation of experience in the implementation of this type of treatment, the study of the structure and causes of

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complications and the further development of methods for their prevention and treatment.

One of the main tasks for the further development of EPA is to resolve the issue of the optimal selection of an embolization drug.

We consider it possible to expand the indications for performing super selective embolization of prostatic arteries, as well as wider application of this technique in clinical practice.

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