

Therapeutic approach in the treatment of benign prostatic hyperplasia

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Research objectives

- To investigate the contemporary literary knowledge of the pathogenesis of benign prostatic hyperplasia.
- Review the drugs which are used in the treatment of benign prostatic hyperplasia, in Republic of Macedonia, explain the mechanisms of action, pharmacodynamics and pharmacokinetics, their interactions, side effects if there are and the way how to use them.
- Review of herbal preparations which are used in the treatment of benign prostatic hyperplasia in Republic of Macedonia.
- To get information about the frequency of prescribing, benefits and improvement of symptoms in drug treatment in the treatment of BPH, patient satisfaction with the use of drugs based on previously structured questionnaire, intended for doctors - specialists in urology in :
 - University Clinic for Urology in Skopje
 - Clinical Hospital “Acibadem Sistina “ in Skopje
 - Hospital “8th of September “ in Skopje
 - Hospital in Veles
 - Hospital in Kavadarci

Materials and methods

Browsers biomedical database

- PubMed
- Cochrane Library
- MEDLINE

Interviews based on a previously prepared questionnaire

- 14 doctors, specialists in urology.
- The first section of questionnaire is about commonly prescribed medications, patient satisfaction while the consumption of drugs, duration of therapy.
- The second part of the questionnaire is designed to get information about herbal medicines

Introduction

- Prostate (glandula prostata) is a small gland, part of the reproductive system in males. The dimensions of the prostate show age and individual.
- Benign prostatic hyperplasia or even also called nodular or stromal hyperplasia is very common abnormality of the prostate. It is present in a significant number of men 40 years of age, and its incidence increasing with age.
- Clinical manifestations occur in only about 10% of men with the disease. Because benign prostatic hyperplasia has a bigger inclination towards the inner parts of the prostate, the most common manifestation is obstruction of the lower urinary tract. In addition, this include: increased frequency of urination, urgency in urination, nocturia, urinary retention, difficulty starting urination, weak stream of urine, a feeling of incomplete emptying of the bladder . Chronical obstruction creates prerequisites for repeated infections of the urinary tract. Also, it can occur and acute urinary obstruction.
- When BPH is diagnosed by the doctor specialist in urology, depending on the severity of symptoms, the risk of progression and morbidity of the patient, the next step is determining the type of treatment, monitoring, drug treatment or surgical intervention.

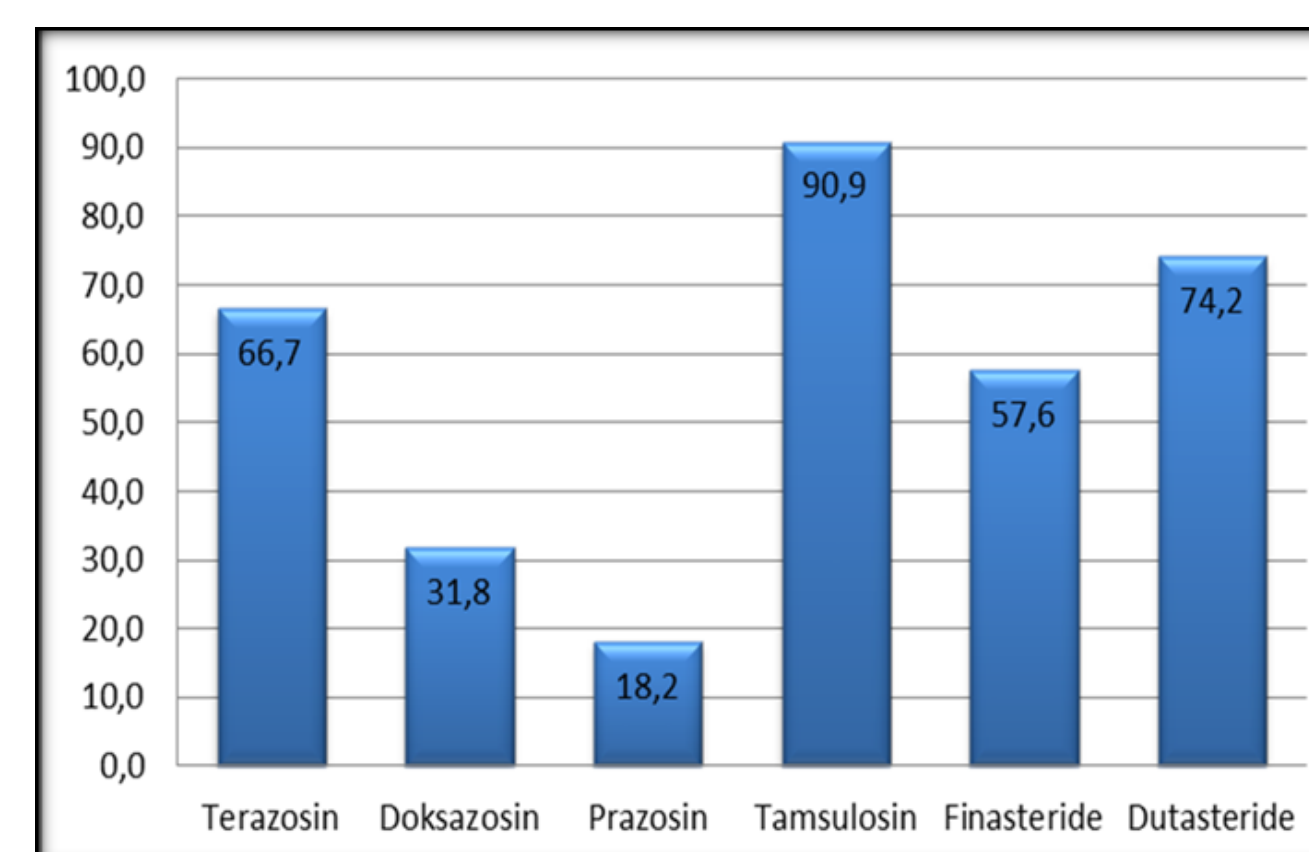
Drug treatment

Drug treatment therapy that is available in Republic of Macedonia is following:

- **alpha - 1 - blockers** : Terazosin, Tamsulosin, Prazosin, Doxazosin, and Alfuzosin. These drugs reduce symptoms, increase the maximum urinary flow and reduce the volume of residual urine . The effect of Alpha1-blockers is seen shortly after starting therapy and proved last few years. Patients should visit their doctor every 1 to 3 months.
- **Inhibitors of 5 alpha – reductase**: Finasteride and Dutasteride. These drugs alleviate symptoms, increase urine flow and decrease obstruction .The effect of these drugs, unlike of alpha - blockers begins slowly, sometimes even after 6 months of starting treatment.
- **5 - alpha reductase and alpha-1 blocker** reduces symptoms faster and better than each of these two drugs separately.
- **As an integral part in determining of the treatment for patients with BPH is phytotherapy or the use of plant extracts.** Commonly used herbal drugs in the treatment of BPH is : Cucurbita pepo, Serenoa repens, Pygeum africanum, Urtica dioica, Secale cereal and lycopene rom tomatoes.

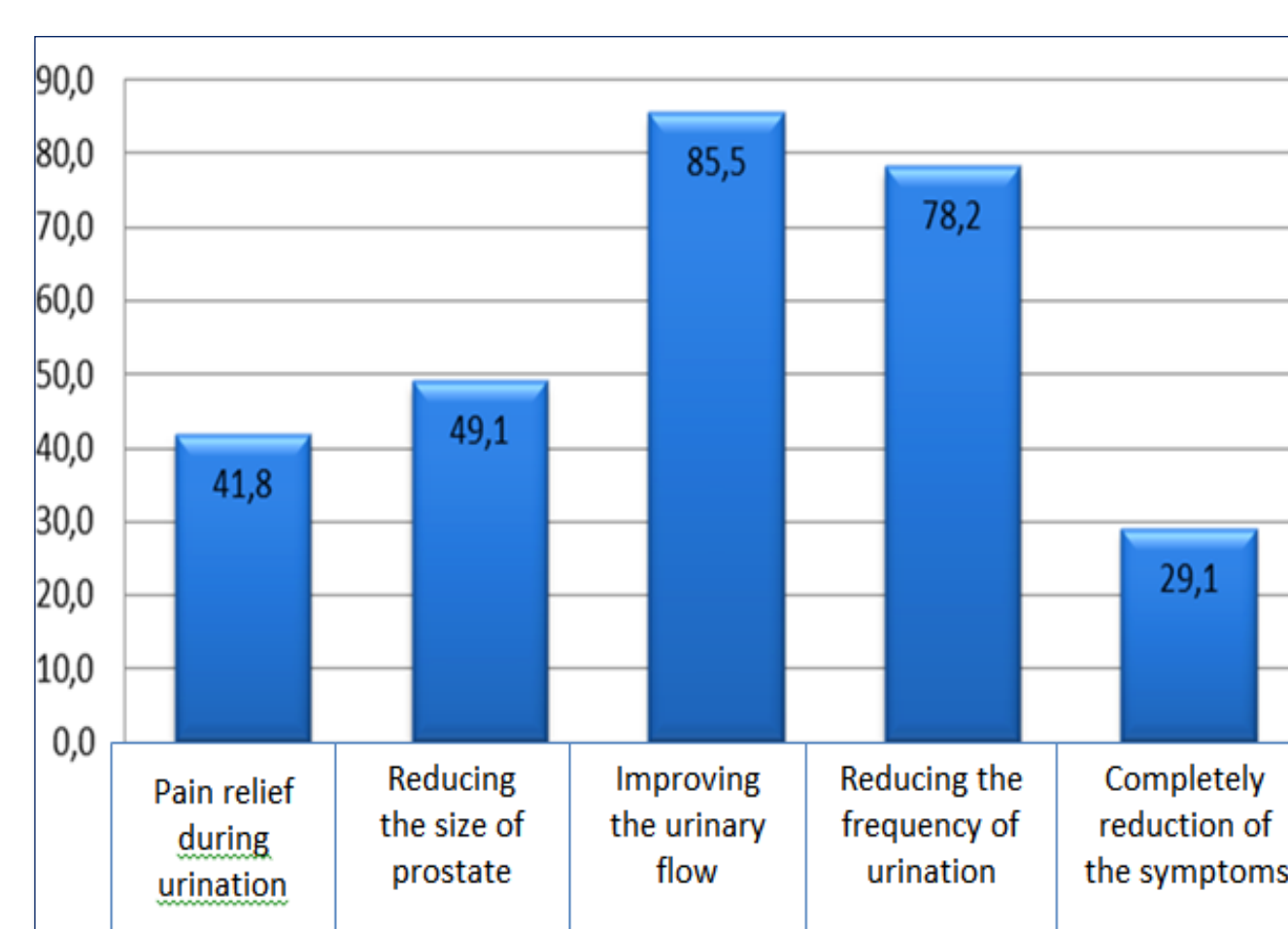
Results

Most often prescribed drug at BHP



According to the information, the most often prescribed drug is Tamsulosin.

Improving the health condition of patients with consuming prescribed therapy



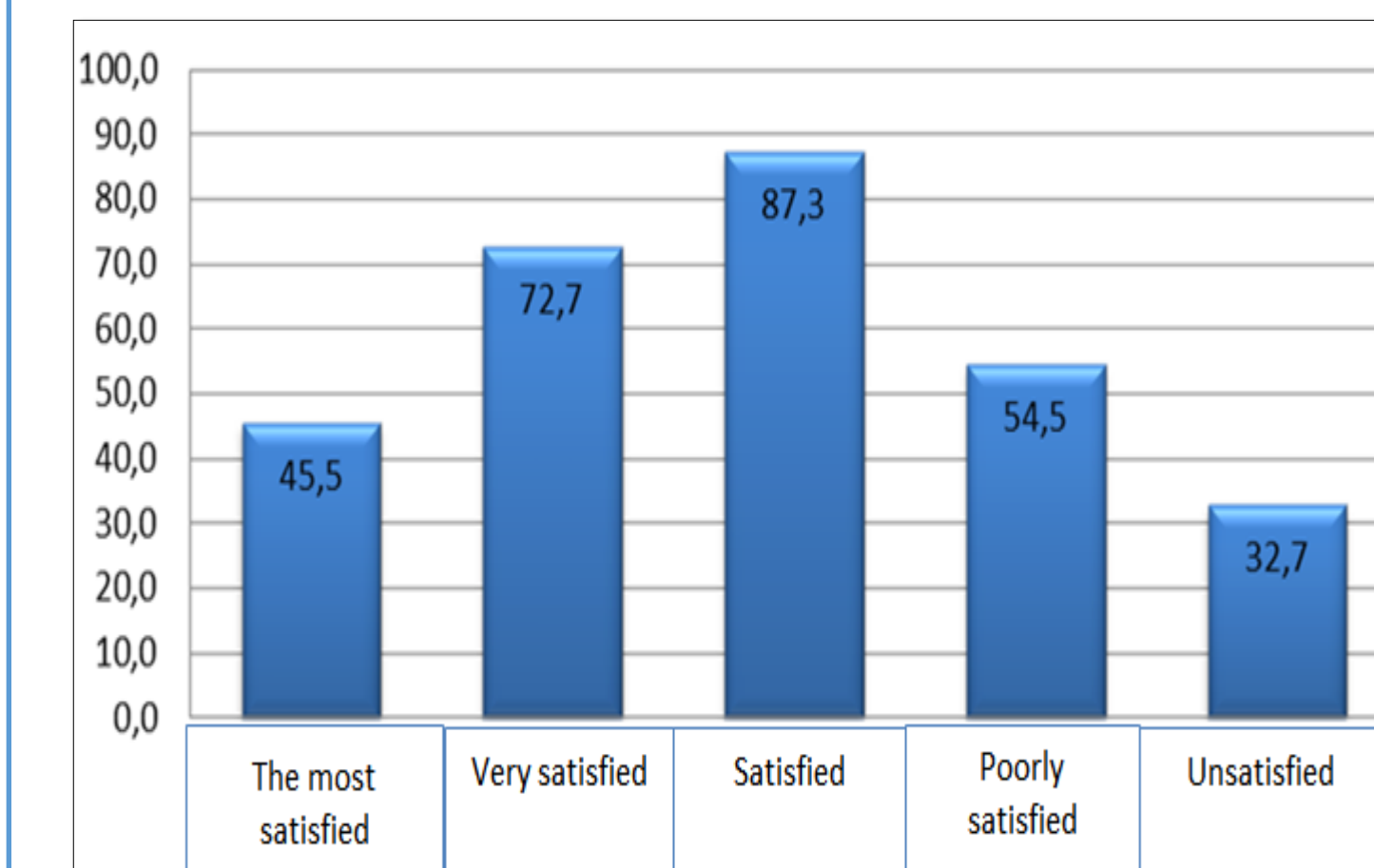
Consuming the prescribed therapy, urine flow is improving the fastest. This information is obtained because this is exactly the response which chosen most of doctors.

Patient satisfaction from using drugs expressed as a percent



Most of the patients are satisfied during the consumption of drugs. It is recognized improving of health.

Satisfied patients by using of herbal preparations in percentage



As an integral part in determining of the treatment for patients with BPH is phytotherapy or the use of plant extracts, and the most of patients are satisfied.

Conclusions

- In some patients with moderate or severe LUTS and clinical difficult BHP, monotherapy is inadequate to control the symptoms. Due to the high risk of progression of BPH it recommends combination therapy.
- According to previous literature findings, experimental works and personal experiences of medical persons, it is proved that a combination of 5 - alpha reductase and alpha-1 blocker reduces symptoms faster and better than each of these two drugs separately.
- Herbal medicines are frequently used as a preventive therapy or in combination with 5 - alpha reductase and alpha-1 blocker reduces.

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