MEDICAL DOCTORS' ATTITUDES TOWARDS PRESCRIBING DRUG TREATMENT FOR BENIGN PROSTATIC HYPERPLASIA

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ABSTRACT

INTRODUCTION: Benign prostatic hyperplasia is a disease that mainly affects men aged over 50 years. In Europe, cases of moderate and severe symptoms vary between 14 and 30%. The therapy of BPH includes various methods and is intended to bring about an improvement in symptoms (irritative or obstructive), urodynamic function and quality of life.

The objective of this article is to present a survey into the attitudes of a group of urologists, providing care in outpatient and inpatient settings, towards therapeutic approaches in the treatment of benign prostatic hyperplasia (BPH) and the level of familiarity and preference for original Tamsulosin 0.4 mg.

MATERIALS AND METHODS: *Sociological method:* a structured interview with 73 urologists country-wide; *Documentary method:* research into regulatory documents; *Statistical methods:* for data processing and analysis of the collected information.

RESULTS: In the opinion of the interviewed urologists, original *Tamsulosin* is the first choice of medication for the management of BPH.

Keywords: attitudes, doctors, treatment, BPH

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INTRODUCTION

BPH is a histological diagnosis characterised by hyperplasia of epithelial and stromal prostate cells; a non-malignant enlargement of the prostate gland which starts with the formation of small nodules in the transition zone of the prostate near the urethra. During its development the prostate gland tissue also proliferates and nodules become larger, which can affect the central and peripheral zones. The causes are still unclear but two main factors are indicated – ag-

ing and androgens. In the process of aging the levels of testosterone decrease whereas those of estrogen increase, the so called andropause. It is considered that this increases the androgen sensitivity of the prostate tissue and directly causes hyperplasia of the stromal cells. The main hormone for the prostatic growth is the androgen dihydrotestosterone (DHT). It is synthesised from testosterone through the enzyme 5α -reductase and binds with the androgen receptors causing prostatic growth. In BPH patients both the enzyme and the receptor number is increased. The condition is not a problem in itself until some symptoms connected with the process start to manifest (1).

Tamsulosin 0.4 mg is used for the treatment of BPH. This is a selective α_{1A} -adrenoceptor blocking agent. It reduces the tension in the smooth muscles of the prostate and the urethra allowing urine to pass more easily through the urethra and facilitating urination. Moreover, it reduces the uncontrollable urge to urinate. The product is used by men in the treatment of lower urinary tract symptoms, associated with enlarged prostate gland (BPH). These symptoms may include difficulty urinating (weak stream), intermittent stream, urgency to urinate and urinary frequency both at night and during the day (2,3).

Since its registration in Europe and USA, among urologists, *Tamsulosin* has become the most frequently prescribed alpha adrenergic receptor antagonist for the reduction of lower urinary tract symptoms and for improvement in the maximal flow rate in BPH patients due to the following factors (2,3):

1. No need for titration of the dose because α_{1A} selectivity prevents effects on the arterial blood pressure.
2. Fast relief of symptoms since the initial dose of 0.4 mg daily is the therapeutic dose.
3. No need for change in the dosage of most frequently applied antihypertensive agents;
4. Reduced frequency of cardiovascular adverse effects (dizziness, asthenia, orthostatic hypotension) compared with generic products.

RESULTS AND DISCUSSION

The structured interview was carried out in June and July 2014. The target group of the survey were 73 urologists from the outpatients' and inpatients' services throughout the country which com-

prises 21% of the urologists in Bulgaria. From the 73 interviewed urologists, 98.6% were men and 1.4% women. Age distribution across the surveyed target group is the following: younger than 40 years of age – 26%; 41-50 years – 30.14%; 51- 60 years – 34.25%; over 60 years – 9.59% (Fig. 1).

Fig. 1. Respondents' age

The majority of the respondents have less than 10 years of experience – 39.62%, followed by between 11-20 years – 37.88%. 25.29% have experience between 21-30 years and those between 31-40 years are just 7.22% (Fig. 2).

Fig. 2. Experience in the speciality

A matter of interest is the question defining the percentage of patients with BPH (What is the percentage of patients that you have diagnosed with Benign Prostatic Hyperplasia/BPH?).

Fig. 3 shows that in the practice of 49 out of all the urologists, the percentage of patients with BPH varies between 51% and 70%; in the practice of 14 of the physicians, the percentage of patients with BPH is 31%-50%; 7 urologists report that their patients with BPH are over 70%; and only 3 of the specialists report that the patients with this diseases are below 30%.

Fig. 3. Patients suffering from BPH

As evident from Fig. 4, 67.12% of the respondents answered that more than half of their patients with lower urinary tract symptoms associated with BPH undergo tests and examination every 6 months. Only 30.14% of the doctors answered that less than half of their patients have periodical follow-ups.

Fig. 4. BPH patients with optimal control

It is obvious from Fig. 5 that 32.88% of patients in the age group 50-60 and 63.01% of those aged 60-70 have complaints related to BPH. The age at which Bulgarian patients visit an urologist coincides with the records regarding the progress of BPH symptoms.

After the initial detecting of BPH more than half of the specialists start treatment with alpha-

Fig. 5. Age range of patients with BPH

blockers (79.45%). A combination therapy is preferred by 8.22%. Identical scores are observed in *Watchful Waiting* and *No Response* and only 1.37% of the respondents think that patients should undergo surgical intervention. No one of the interviewed physicians prescribe phytotherapy products, which is a fact worth of note (Fig. 6).

Fig. 6. Approaches after BPH is initially detected

A significant majority of the respondents (89.78%) prefer original medicines for the treatment of BPH. A minor score of 5.22% prescribe generic medicines (Fig 7).

Fig. 7. Medicines preferred by doctors

According to more than half of the interviewed (87.27%), the original medicines are most effective (Fig. 8).

As a first choice 68.49% of the medical doctors prefer original *Tamsulosin*; 19.51% report about the use of a combination of medicines and 12% prescribe a generic *Tamsulosin* (Fig. 9).

Fig. 8. Effectiveness of original medicines

Fig. 9. First medication choice for treatment of BPH

The attitude of the urologists is towards treatment of BPH with original *Tamsulosin*. This could be due to the fact that the medicine concerned is the first original medicine on the Bulgarian market and doctors, apart from having significant experience in the treatment of BPH, have also built trust in the product.

CONCLUSIONS

The results from the survey indicate the following:

1. After the initial detection of BPH doctors' attitude is towards treatment with an alpha-blocker;
2. To a large degree urologists are familiar with and prefer the original *Tamsulosin*;
3. The survey indicates that urologists have developed a positive attitude and experience in the use of original *Tamsulosin* 0.4 mg for the treatment of BPH.

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