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TREATMENT OF LOWER URINARY TRACT SYMPTOMS DOES NOT ALWAYS REFLECT PHYSICIAN-REPORTED DIAGNOSIS: RESULTS OF A REAL WORLD SURVEY OF TREATMENT PATTERNS IN EUROPE AND THE USA

Hypothesis / aims of study
Regardless of the underlying pathophysiology, physicians usually treat men with lower urinary tract symptoms (LUTS) with prostate-specific drugs, e.g. benign prostatic hyperplasia (BPH) with α-blockers with or without 5α-reductase inhibitors, and men or women with symptoms of the overactive bladder (OAB) with bladder-specific drugs, i.e. with antimuscarinics. However, there is growing evidence that other causes of LUTS need to be considered as well, for example the treatment of nocturia due to nocturnal polyuria (NP) with antidiuretics, i.e. desmopressin. The aim of our study was to assess the extent to which treatment with specific BPH and/or OAB therapies remains despite increasing awareness of other LUTS diagnoses.

Study design, materials and methods
Data were drawn from the Adelphi Lower Urinary Tract Symptoms Disease Specific Programme, a cross sectional survey of physicians and their consulting patients in France, Germany, Spain, UK, and USA. The 635 participating primary care physicians or urologists/ gynaecologists completed records of their patients, including details of diagnosis and currently prescribed therapy. Each physician completed a detailed patient record form for the next 14 consulting patients whose diagnosis included BPH, OAB and/or nocturia/NP. Multiple diagnoses were captured on the record form and were based on the judgement of the treating physician. Tests conducted to aid diagnosis were captured but no tests or investigations were required for a patient to be included in the study, nor were they conducted as part of the study itself. The methodology, including limitations, has been outlined previously [1].

Results
A total of 9486 diagnoses were documented for the 8738 patients of this study. Information on patient demographics, symptoms and assessment results are listed in **Table 1**. OAB was present in 46.6% of the participants, clinical BPH in 47.4% and other diagnoses, primarily nocturia/NP, in 6.0% of patients. The average age of the patients was older than 60 years in all three groups; patients with the clinical diagnosis of BPH were approximately 7 years older than patients with OAB or nocturia/NP. All patients were symptomatic at the time of diagnosis and participants reported about a varying amount of urgency, daytime frequency and/or nighttime frequency. More men or women with OAB had urgency and daytime frequency than the other groups, whereas more patients with nocturia/NP reported about nighttime frequency. However, 85% of patients with the diagnosis of nocturia/NP also had daytime frequency. Diagnoses of OAB, BPH, or nocturia/NP were mainly based on patient history and, to a lesser extent, on the results of the voiding diary. Of all patient groups, the voiding diary was least used for the diagnosis of BPH.

Treatment data according to the clinical diagnoses are listed in **Table 2**. The majority of patients with OAB received antimuscarinics and the majority of men with BPH used α–blockers. However, more than 60% of patients with nocturia/NP received antimuscarinics and/or α–blockers as well, whereas only 16.3% used desmopressin. Despite the diagnosis of primary nocturia/NP, 20.5% of these patients did not receive any drug for their symptoms. In contrast, a lower amount of patients with OAB (13%) or BPH (8%) did not use any drugs.

Table 1: Demographics, symptoms, and tests of patients investigated in the study

Patient Demographics	**Any OAB** (n=4425)	**Any BPH** (n=4492)	**No OAB or BPH (primarily nocturia/NP),** (n=569)
Mean age (years)	61.0	67.9	61.4
Male	29%	100%	44%
Female	71%	0%	56%
BMI (mean)	27.3	27.5	27.5
Symptom present (% pts):			
Daytime frequency	89%	87%	85%
Nighttime frequency	66%	83%	94%
Urgency	87%	78%	52%
Mean voids (previous 7d):			
Day	7.2	6.4	5.2
Night	2.4	2.4	3.6
Diagnostic tests (% pts):			
Patient history	89%	87%	91%
Voiding diary	46%	28%	46%

Table 2: Treatment/drugs used within the clinical groups

Therapy Type	**Any OAB** (n=4425)	**Any BPH** (n=4492)	**No OAB or BPH (primarily nocturia/NP),** (n=569)
Antimuscarinic	70.8%	12.1%	45.8%
α-blocker	15.4%	64.8%	13.5%
5α-reductase inhibitor	4.7%	21.2%	3.0%

Others	5.5%	17.3%	24.6%*
No drug	13.0%	8.0%	20.5%

* Approximately two third of these patients receive desmopressin

Interpretation of results

The clinical diagnosis of patients is usually made by evaluation of the patient history. Although the diagnosis of NP can only be made by completing a voiding diary, less than 50% of patients with nocturia/NP used this diagnostic tool. The majority of patients with OAB or clinical BPH receive drugs focusing on the bladder or prostate which reflect an established treatment pattern. Despite growing evidence in the literature suggesting the need for nocturia-specific treatment, the majority of patients continue receiving OAB and/or BPH-specific therapies. Patients with nocturia/NP are at highest risk for not receiving any drug for their symptoms.

Concluding message

Physicians should be aware that the origin of LUTS may be nocturia/NP and not always OAB or BPH. Voiding diaries should especially be used in patients with nocturia/NP to discriminate between different causes. Once the diagnosis of nocturia/NP is made, physicians should be encouraged to use antidiuretic treatment (e.g. desmopressin).

References

1. Anderson et al, 2008

Disclosures

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