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DIAGNOSIS AND TREATMENT OF LOWER URINARY TRACT SYMPTOMS, OVERACTIVE BLADDER, AND BENIGN PROSTATIC HYPERPLASIA IN MEN IN UK GENERAL PRACTICE

Hypothesis / aims of study

We assessed the recorded diagnosis of overactive bladder (OAB), benign prostatic hyperplasia (BPH), and lower urinary tract symptoms (LUTS) suggestive of OAB and BPH in men in UK General Practice, and the treatment of these conditions with: 5-alpha-reductase (inhibitors (ARI) and α-blockers (AB) for BPH and anti-muscarinic (AM) agents for OAB. Previous UK GP studies have associated all LUTS types (storage, voiding, and post-micturition symptoms) with BPH, and there is little information available on the epidemiology of OAB and the storage LUTS that comprise OAB. To address this we have differentiated between storage symptoms suggestive of OAB and voiding symptoms suggestive of BPH.

Study design, materials and methods

A population-based study was conducted using The Health Improvement Network (THIN) database which included records from 308 GP practices. The study period was 2000-2004 and the study population was men aged ≥18 years (n=1.083 million on 1/1/2004). In THIN diagnoses, signs and symptoms are recorded using Read codes. OAB was identified by codes recording a diagnosis of OAB or symptom codes for storage LUTS suggestive of OAB (Read codes for Micturition frequency, Frequency of micturition, Urinary frequency, Micturition control, Urinary control, Urgency, Urgency of micturition, Urge incontinence of urine, Urge incontinence, Frequency of micturition (unspecified), Urge incontinence, Nocturia). BPH was identified by codes for BPH diagnosis or symptom codes for voiding LUTS (Read codes for Micturition stream, Urine stream, Micturition stream poor, Hesitancy, Hesitancy of micturition, Precipitancy of micturition, Terminal dribbling of urine, Dribbling of urine, Micturition stream NOS, Prostatism, Micturition volume). We excluded patients who had codes for malignant prostate conditions at any time. We identified prescriptions for drugs from 3 classes. AM: oxybutynin, flavoxate, propiverine, tolterodine, trospium, propantheline. AB: alfuzosin, doxazosin, indoramin, prazosin, tamsulosin, terazosin. ARI: dutasteride, finasteride.

Results

Epidemiology

Prevalence of recorded OAB rose from 1.94% in 2000 to 3.06% in 2004; for BPH it rose from 2.42% to 3.14%. Over the 5-year study period, 25,688 men were newly recorded as having OAB and 21,446 with BPH. The median age at which OAB was first recorded was 62 years (Interquartile range (IQR) 49-73) and for BPH it was 66 years (IQR 58-74). The largest numbers of newly recorded cases of LUTS were in people aged 60 to 79 years; this age group accounted for 43.1% of incident cases of OAB and for 58.2% of incident cases of BPH. In 2004, 28% of patients with BPH had recorded co-diagnosis/symptoms of OAB while 29% of those with OAB also had recorded co-diagnosis/symptoms of BPH.

Treatment

Treatment rates for OAB were low and did not change between 2000 and 2004 (Table 1). Only 16.1% of men with recorded OAB alone received prescriptions during 2004 and 10.2% (nearly two thirds of the treated patients) were prescribed an AB.

The proportion of patients receiving treatment for BPH alone or for BPH+ OAB did increase between 2000 and 2004, but still only 5.0% of patients with recorded OAB + BPH received prescription treatment for both conditions in 2004. Treatment rates increased with age and were highest in men aged 80+ years. In 2004 in this age group they were: OAB 30.1%; BPH 38.7%; and OAB + BPH 53.9%.

Table 1 Treatments prescribed to patients with OAB, BPH or OAB + BPH in 2000 and 2004

	OAB only		BPH only		OAB + BPH	
% of patients prescribed:	2000 (N=15,795)	2004 (n=26,021)	2000 (N=20,181)	2004 (n=25,194)	2000 (N=6,451)	2004 (n=10,675)
None	85.29	83.86	74.43	66.53	59.37	49.95
AM only	6.35	5.00	1.44	1.17	9.01	6.05
AB only	6.69	8.60	18.01	23.11	22.29	28.25
AB+AM*	0.79	0.95	0.45	0.55	2.85	3.58
ARI only	0.60	0.82	4.01	4.61	3.83	4.95
ARI+AM*	0.05	0.11	0.10	0.14	0.56	0.69
ARI+AB*	0.20	0.60	1.49	3.73	1.83	5.85
ARI+AB+AM*	0.04	0.07	0.07	0.16	0.26	0.68

* patients who received more than one class of drugs in a 12 month period – but not necessarily concomitant treatment

Interpretation of results

Treatment rates for LUTS conditions were very low in a UK General Practice setting, particularly for OAB. Although treatment rates for BPH alone and OAB + BPH were higher than for OAB alone, still more than half of men with recorded LUTS did not receive prescriptions for any of the three drug classes. Men with BPH often had co-existing OAB, but these men were much more likely to receive only BPH treatment. In men with OAB alone and OAB + BPH, much of the treatment appeared to target voiding symptoms suggestive of BPH rather than storage symptoms indicating OAB.

Concluding message

Despite the availability of effective prescription therapies, LUTS, OAB, and BPH in men are largely untreated in UK General Practice.

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HUMAN SUBJECTS: This study was approved by the London Multicentre Research Ethics Committee (MREC) but did not follow the Declaration of Helsinki - with approval by the ethics committee - in the sense that This was a retrospective observational study using anonymised data. Informed consent was not obtained from the patients.