

## Overactive bladder in men:

### a practical approach

Overactive bladder (OAB) is a significant source of morbidity in males, with a prevalence of 10–16%, and with only a small fraction of these being treated.<sup>1–3</sup> OAB results in considerable and progressive deleterious effects on the productivity and quality of life (QoL) of patients, leading to a substantial economic burden of disease, related to increased absenteeism, worry about interruption and scheduling of meetings, early retirement, and permanent disability.<sup>4,5</sup>

Symptoms of OAB are often attributed to bladder outflow obstruction (BOO) in males, resulting in misdiagnosis and delays in treatment. Given its prevalence, QoL impact, and the availability of initial non-invasive and well-tolerated management options, OAB is often best addressed in the primary care setting.

#### INITIAL WORK-UP

**History.** The International Continence Society (ICS) defines OAB as a symptom complex primarily dominated by urinary urgency with or without urge incontinence, usually associated with urinary frequency and nocturia in the absence of other pathology. In contrast, bladder outlet obstruction (BOO) customarily presents with weak or intermittent stream, hesitation, straining, and incomplete emptying. Patients may present in practice with a spectrum of voiding complaints and symptoms of both OAB and BOO may be found in any given patient (in part due to coexistent disease and/or overlapping pathophysiology). If one symptom complex is more bothersome to the patient, that should be addressed first.

A thorough history includes a detailed voiding history (for example, storage and voiding symptoms, incontinence, haematuria), sexual history, fluid intake, pad use, voiding diary, risk factors, and contributing medical conditions. A short, validated questionnaire, the OAB-V3, can be used to screen for OAB symptoms (Table 1), which may aid in bringing this complaint to the attention of the clinician. Special consideration for frail

older patients is important due to comorbid mobility limitations, excess urine production, and psychological and pharmacological factors.

**Physical examination.** The physical exam should reflect the patient's symptoms, aiming to exclude other diagnoses. The European Association of Urology (EAU) recommends focused abdominal (palpable bladder), genital, rectal, and neurological examination.<sup>6</sup> In particular, a digital rectal exam is imperative to rule out the presence of prostatic hypertrophy, malignancy, and poor rectal tone. Identification of high-risk neurological causes of OAB (for example, spinal cord injury, myelodysplasia, multiple sclerosis) is key as these patients are at risk of upper tract deterioration/renal failure.

**Investigations.** Recommendations for the investigation of patients differ across guidelines, although urinalysis is universally recommended. Other investigations to consider, based on clinical context and availability, are urine microscopy, culture, blood glucose, PSA, flow rate, and post-void residual volume. In some patient presentations, these tests may identify conditions that may require specialist referral: polyuria, recurrent infection, stone disease, bladder outlet obstruction, stricture, fistulous disease, or malignancy.

#### MANAGEMENT

**Behavioural changes.** Conservative lifestyle management strategies represent the cornerstone of initial treatment and include scheduled/double voiding, pelvic floor muscle training, fluid restriction, dietary changes (for example, limiting caffeine, alcohol, spicy foods, and other bladder irritants), and smoking cessation. These should be tailored to a patient's presentation and impact on their quality of life. Although not specific to males, several patient resources are available free-of-charge online; for example, the British Association of Urological Surgeons has a

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**Table 1. The 3-item OAB Awareness Tool (OAB-V3) (positive screen  $\geq 4$ )<sup>a</sup>**

How bothered have you been by ...	Not at all	A little bit	Somewhat	Quite a bit	A great deal	A very great deal
1. Frequent urination during daytime hours?	0	1	2	3	4	5
2. A sudden urge to urinate with little or no warning?	0	1	2	3	4	5
3. Urine loss associated with a strong desire to urinate?	0	1	2	3	4	5

<sup>a</sup>Adapted from Coyne et al.<sup>7</sup> OAB = overactive bladder.

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## Provenance

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## Competing interests

The authors have declared no competing interests.

handout on bladder retraining (<https://tinyurl.com/OABresource1>), the EAU's website discusses self-management strategies (<https://tinyurl.com/OABresource2>), and Brigham and Women's Hospital has published an extensive list of bladder irritants and potential substitutes (<https://tinyurl.com/BladderIrritants>).

**Herbal remedies.** Herbal remedies are an under-represented but important treatment consideration as up to three-quarters of OAB sufferers seek out complementary and alternative medicines. Gosha-jinki-gan, hachi-mi-jio-gan, and ganoderma lucidum have been suggested to offer some benefit to patients; however, limited data exist on these treatments and National Institute for Health and Care Excellence (NICE) guidelines do not recommend their use.<sup>8,9</sup>

**Pharmacological treatments.** Many practitioners initiate therapy with alpha-adrenergic blockers (for example, tamsulosin, silodosin) or 5-alpha-reductase inhibitors (for example, finasteride, dutasteride) due to the high prevalence of concurrent BOO worsening OAB symptomatology. In these cases, combination or sequential addition of anticholinergic therapy can be successful and should be considered.

However, in males with predominant OAB symptoms, a trial of alpha-adrenergic blockers and/or 5-alpha reductase inhibitors may be foregone: monotherapy with anticholinergics or beta-3 agonists has been shown to be safe and efficacious. It is recommended to avoid oxybutynin (immediate release), as it has the most side effects; the authors often start with either fesoterodine fumarate or darifenacin hydrobromide. The risk of acute urinary retention is minimal and should not preclude anticholinergic use in a primary care setting. These medications are contraindicated in closed-angle glaucoma, gastrointestinal diseases (ileus, bowel stenosis, severe inflammatory bowel disease, toxic megacolon), myasthenia

gravis, tachyarrhythmias, and pre-existing urinary retention. If an initial trial of anticholinergic medication is unsuccessful, a subsequent trial of a different anticholinergic (or dose escalation) remains warranted as patients can respond differently to different formulations.

Alternatively, beta-3 agonists (for example, mirabegron) are well tolerated and the authors' experience with using them as a first-line agent is excellent; however, the cost-effectiveness of these agents remains unproven, and availability may be limited. Unfortunately, studies show the majority of patients do not remain on pharmacological treatment long term because of adverse effects, efficacy concerns, and spontaneous improvement.<sup>10</sup> Close follow-up regarding symptoms, adherence/compliance, and tolerance of medications is warranted; the EAU and NICE recommend 4- to 6-week follow-up after starting or adjusting new therapy.

**Further therapies.** Failure of empirical pharmacotherapy generally warrants specialist referral for further investigation. The specialist toolbox includes further diagnostic testing with cystoscopy and urodynamics, and invasive treatment options including intravesical injections, neuromodulation, catheterisation, urinary diversion, and bladder augmentation. Intravesical onabotulinumtoxinA injections are performed via cystoscopy under local anaesthetic and may provide relief from OAB symptoms for 6–9 months. Sacral neuromodulation involves implanting a device that sends electrical signals via the sacral nerve roots to normalise bladder and bowel function.

## CONCLUSION

Male OAB is an under-recognised/under-treated entity with significant QoL impact on patients. With a careful history and focused physical examination, concomitant BOO should be evaluated along with rare but important alternative diagnoses. Patients should be counselled regarding conservative and pharmacological management strategies, with specialist referral reserved for complex or refractory cases.

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