INTRODUCTION
Symptoms suggestive of overactive bladder (OAB) have a relatively high prevalence, with an estimated 16% of patients aged ≥40 years living with the condition.1 It affects both sexes and its prevalence increases with age. The International Continence Society defines OAB as urinary urgency, usually associated with frequency and nocturia, with or without urge incontinence, in the absence of urinary tract infection or other obvious pathology.2 It continues to have a significant impact on quality of life and has been associated with increased falls, fracture risk, and skin breakdown.3 GPs are often the first to review patients presenting with OAB and so must ensure that patients are managed appropriately, with referral to secondary care services when indicated. This article provides a clear pathway and practical approach in the management of these patients.

GUIDANCE
History
A diagnosis of OAB is initially based on a good history. Patients should be asked about the onset and duration of symptoms, which symptoms are the most bothersome, and any related concerns that they may have. Storage lower urinary tract symptoms (LUTS) predominate and should be noted: urgency, frequency, nocturia, or urinary incontinence (UI). If UI occurs it is important to establish what type, as both stress UI and urgency UI can coexist. The presence of voiding LUTS may point to a more complex diagnosis and the patient may need referral to specialist care. GPs should consider the patient’s drug history because several medications can affect bladder function. A complete clinical history is mandatory because it is important to explore whether there are any red-flag features (Box 1).

Examination
A full examination of the abdomen, pelvis in women, and digital rectal examination (DRE) in men are necessary, which will also include an examination of the external genitalia. A general inspection provides useful information on the patient’s overall health, including their weight, gait abnormalities, and obvious neurological disease. The abdomen is assessed for a palpable bladder or masses. The presence of atrophic vaginitis and normal vaginal sensations should be noted, as well as the existence of pelvic organ prolapse. A DRE allows assessment of the prostate for abnormalities in men and the sphincter tone and peri-anal sensation. Any concerning features should prompt urgent referral to secondary care.

Investigations
The initial investigations are simple and relatively few. A urinalysis is important because urinary tract infections can mimic LUTS. Moreover, it helps identify those patients who have non-visible haematuria or glycosuria, which may require further investigations. A 3-day voiding or bladder diary can provide a true representation of the patient’s urinary frequency and also their functional bladder capacity. Quality of life questionnaires aid in assessing the impact and efficacy of treatment. A post-void residual measurement is performed when there is associated voiding difficulty or pelvic organ prolapse. Some clinicians
Figure 1: Algorithm for treatment of overactive bladder symptoms. FV = frequency volume. PV = post-void.

Initial presentation

- History
- Examination
- Urine dipstick
- PV residual (voiding symptoms)
- FV chart/bladder diary 3 days

Conservative management

- Adjust relevant medication
- Bladder retraining
- Pelvic floor exercises
- Lifestyle modifications
  - weight loss
  - correct constipation
  - reduce caffeine/exacerbants

Medications

- Antimuscarinics
- oxybutinin
- tolterodine
- darifenacin
- solifenacin
- trospium
- fesoterodine
- trosiptum

Start at the lowest dose and titrate up accordingly

Refer to secondary care

Conservative management

- If contraindicated, go straight to beta-3 agonist
- Neutrophil ratio
- Urinary retention/significant bladder outlet obstruction
- Severe ulcerative colitis
- Toxic megacolon
- Gastrintestinal obstruction
- Intestinal atony
- Closed-angle glaucoma

Are there improvements?

- No
- Yes

Medications

- Antimuscarinics
- Alpha-blocker
- Beta-blocker
- Calcium channel blocker
- ACE inhibitors
- Angiotensin receptor blockers
- Thiazides
- Diuretics

Has already tried two different antimuscarinics?

- No
- Yes

Alternatively go straight to beta-3 agonist

Beta-3 agonist

- Mirabegron

If no changes to current regime

- Consider another antimuscarinic, titrating up to the highest dose (maximum two different antimuscarinics)

CONCLUSION

Treat patients with OAB can be rewarding, and a good clinical history together with clinical examination will allow for a systematic approach to management. It is crucial that the patient understands the role they play in the management of their symptoms. Realistic goals should be set between the GP and the patient, and progress monitored. Raising the awareness of managing OAB can help reduce the number of patients suffering unnecessarily.

REFERENCES


Interventions

Conservative management. Conservative therapy should be first line as it has a low risk profile. It involves shared decision making as patient involvement and cooperation are integral to management. This will include behavioural changes and lifestyle adjustments such as altering fluid intake, bladder retraining, weight loss, smoking cessation, and avoiding exacerbants (for example, the caffeine found in tea, coffee, cola and energy drinks). An assessment and modification of medication need, including diuretics, may be all that is required to notice significant improvement. Patients should start pelvic floor muscle training, especially in the context of mixed urinary incontinence. 

Medications

Antimuscarinics. Antimuscarinics are used for the treatment of OAB symptoms but should be prescribed cautiously in older patients due to the side effects profile of these drugs. Various medications that are used in older patients have an anticholinergic burden that can be associated with clinically significant adverse events including cognitive impairment. The patient should be advised that they may get unwanted side effects prior to any benefit and it may take up to 4 weeks for the medication to work. In clinical practice, antimuscarinics have relatively equal efficacy and should be tailored to the patient, starting with the lowest dose.

Beta-3 agonist. Mirabegron is a selective beta-3 agonist and is often recommended if antimuscarinics are contraindicated, or as a second- or third-line treatment following the use of antimuscarinics. Caution is required in patients with hypertension and on medication, as increased monitoring may be required.

Intravaginal oestrogens. Topical oestrogen can be beneficial in the context of vaginal atrophy and may help improve symptoms in post-menopausal women. However, the ideal duration of therapy is uncertain.

Referral to secondary care

As OAB is mainly a clinical diagnosis with very few specialised tests, it is expected that GPs will be able to start treatment in uncomplicated cases (Figure 1). Those with a specialist interest in OAB may be confident in prescribing combination therapy with solifenacin 5 mg and mirabegron 50 mg based on recent trial data if monotherapy has failed. However, it is acceptable for this to be reserved for specialist care. Any patients with any red-flag symptoms/ signs should be referred immediately due to the potential complexity of their clinical picture and the need to rule out any serious diagnoses [Box 1].

Provenance

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The authors have declared no competing interests.

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