

Overactive bladder/urgency predominant mixed incontinence (urinary urgency, frequency, nocturia with or without incontinence)

Refer to secondary care if any red flag symptoms:

- Haematuria (microscopic or macroscopic >40years age)
- Urinary retention or voiding difficulties
- Bladder pain
- Recurrent UTIs

**Counsel patient** – Overactive bladder (OAB) is a long term condition, and significant lifestyle modification may be required.

**Discuss behavioural modifications**

- Lifestyle changes e.g. cut down on caffeinated drinks, herbal teas, alcohol, chocolate, tomatoes, citrus and spicy foods. Don't cut back on fluid intake.
- To help constipation, which can also make OAB worse, recommend a high-fibre diet or prescribe laxatives
- Weight loss if BMI $\geq$ 30
- Stop smoking
- Review poorly controlled diabetes – glucosuria will exacerbate OAB symptoms
- Bladder training (6 weeks) contact Shropshire community continence team ring 01743\_444062 or write to Halesfield 6, Telford, TF7 4BF
- Pelvic floor exercises (3 months) contact Shropshire community continence team (see above for details)
- Provide patient support information <https://www.bladderandbowelfoundation.org>

**Review the patient after 6 weeks**

**If suboptimal improvement or no improvement, consider pharmacological treatment. Before starting for ALL patients:**

- Discuss patient expectations and likely benefits of drug treatment
- Explain that some adverse events such as dry mouth and constipation may indicate the treatment is starting to have an effect but they may not see the full benefit until they have taken the treatment for 4 to 8 weeks

**Before commencement of any drug treatment review patient's current medication- for drugs which can contribute to development of overactive bladder**

Typical antipsychotics eg. Chlorpromazine, trifluoperazine, fluphenazine  
Antidepressants  
Diuretics  
Calcium Channel Blockers  
Sedative Hypnotics eg. Benzodiazepine  
ACE inhibitors and Angiotensin Receptor Blockers  
Hydroxychloroquine

#### **First line Drug treatment**

Consider contraindications to antimuscarinic agents and calculate total anticholinergic load see [risk score](#) or [Anticholinergic Cognitive Burden Scale](#) from concomitant medications before initiating a drug for OAB.

**Oxybutynin Immediate Release 2.5-5mg twice daily to three times daily**

**Toilerodine Immediate Release 1mg - 2 mg twice daily (1 mg twice daily if eGFR  $\leq$ 30ml/min)**

Do not offer oxybutynin (immediate release) to older women who may be at higher risk of a sudden deterioration in their physical or mental health

Offer a transdermal overactive bladder treatment to women unable to tolerate oral medicines Oxybutynin patch **3.9mg/24 hours**

**Apply one patch twice weekly (change every 3-4 days)**

If Anticholinergic drugs are contraindicated (glaucoma, myasthenia gravis, GI obstruction or specific problems with dry mouth or constipation) consider a non antimuscarinic.

**N.B.** Drug interactions include some antiarrhythmics, tricyclics, citalopram, escitalopram, antihistamines, antiretrovirals and chloroquine. Omit 1<sup>st</sup> and 2<sup>nd</sup> line treatment and use 3<sup>rd</sup> line beta 3 agonist - mirabegron in line with TA290.

Offer intravaginal oestrogens for OAB symptoms in postmenopausal women who do not have any contraindications. Women with recurrent cystitis will also benefit from vaginal estrogens.

#### **Second Line Drug Treatment**

**Toilerodine Modified Release 2mg -4 mg daily (2mg if eGFR $\leq$ 30ml/min)**

**Solifenacin 5 mg once daily**

**Trospium modified release 60mg XL** limited blood brain barrier penetration useful if neurological side effects are a problem

**Oxybutynin transdermal patch** – for patients unable to tolerate oral medication only

#### **Third Line Drug Treatment**

**Mirabegron 50 mg once daily** (Non-antimuscarinic) in whom antimuscarinic drugs are contraindicated or clinically ineffective, or have unacceptable side effects (NICE TA290)

**Mirabegron is contraindicated for patients with severe uncontrolled hypertension (systolic blood pressure > 180mm Hg or diastolic BP > 110mm Hg or both. Blood pressure should be measured before starting treatment and monitored regularly during treatment**

**Patients should try two anticholinergics or one anticholinergic and one non-antimuscarinic (unless contraindicated) prior to referral to secondary care. Patients on long term therapy should be reviewed annually (or every 6 months if over 75 years) to assess whether there is benefit from continued treatment.**

**Following 6 months of satisfactory resolution of symptoms (according to patient) reduce and stop treatment. Evidence suggests that approximately 50% of women can stop treatment at this stage. Review women who remain on long-term drug treatment annually (6 monthly if >75 years)**

**Reference:** Tsakiris P, Oelke M, Michel MC. Drug-induced urinary incontinence. *Drugs Aging*. 2008;25:541-549.