OAB in neurological diseases is outside the scope of the guideline but is covered in NICE Clinical Guideline 148.

### Initial Assessment and Conservative Management

E.g. lifestyle interventions (see page 3), bladder training for a minimum of 6 weeks. All patients should be referred to the Wirral Integrated Continence Service (WICS), but consider the exclusion criteria in the secondary care referral form.

### Before Starting OAB Drugs

When offering antimuscarinic drugs to treat OAB always take account of:
- Coexisting conditions (e.g., *poor bladder emptying, constipation, glaucoma*).
- Use of other existing medication affecting the total antimuscarinic load.
- Risk of adverse effects.

Discuss with patient:
- The likelihood of success and associated common adverse effects, and
- The frequency and route of administration, and
- That some adverse effects such as dry mouth and constipation may indicate that treatment is starting to have an effect, and that they may not see the full benefits until they have been taking the treatment for 4 weeks.

Consider bladder training programme in combination with an OAB drug if frequency is a troublesome symptom.

Prescribe the *lowest* recommended dose when starting a new OAB drug to reduce the likelihood of side-effects. (See individual summaries of product characteristics for full prescribing information).

### Choosing OAB Drugs

**First Line Drug Treatment**
- Oxybutynin (IR) initially 5 mg two to three times daily.
  OR
- Tolterodine (IR) 2 mg twice daily; reduce to 1 mg twice daily if necessary to minimise side effects.
  OR for a *once-daily preparation*.
- Trosplum modified release (MR) 60 mg taken once daily (for older patients) or Tolterodine MR 4 mg once daily.

**Do Not Use:**
- Flavoxate, propantheline and imipramine.
- Immediate release (IR) oxybutynin in frail older patients.
- Duloxetine should not be used in the treatment of OAB but may be initiated by specialists for stress incontinence.

### Review

Offer a face-to-face or telephone review 4 weeks after the start of each new OAB drug treatment until stable or before 4 weeks if adverse events of OAB drug are intolerable.

Review patients on *long-term treatment* annually (or every 6 months if over 75).

### If the Patient Suffers Unacceptable Side Effects

- **Mirabegron**: Prescribing should be in accordance with NICE TA 290 and is only an option when antimuscarinics are contraindicated clinically, are clinically ineffective or there are unacceptable side effects. It is contraindicated in patients with severe uncontrolled hypertension.

### Unsuccessful or Long-Term Treatment

- **Mirabegron**: Prescribing should be in accordance with NICE TA 290 and only if antimuscarinics are contraindicated clinically, are clinically ineffective or there are unacceptable side effects.

### Unsuccessful or Long-Term Treatment

- Consider **transdermal oxybutynin** if unable to tolerate oral medication, patient has uncontrolled hypertension or if patient has swallowing difficulties.

### If Medication is Ineffective

- **SECOND LINE DRUG TREATMENT**
  - Tolterodine MR
  - Oxybutynin MR
  - Trosplum IR or MR
  - Solifenacin
  - Mirabegron (in accordance with NICE TA 290 and only if antimuscarinics are not an option (but see warning in box above and monitor BP regularly).

### Referral to Secondary Care

E.g., If conservative measures fail or if a patient does not want to try another drug or if a patient wish to discuss the options for further management (non-therapeutic interventions and invasive therapy).
INVASIVE THERAPY FOR OAB:¹

First Line
Bladder wall injection with botulinum toxin A can be considered after a Multidisciplinary Team (MDT) review for patients with OAB caused by proven detrusor overactivity that has not responded to conservative management (including OAB drug therapy).
- Botox® is the only brand currently licensed for this indication. The drug has RED status. Therefore prescribing should be initiated by specialists only and ongoing prescribing should be retained within secondary care.
- Botulinum toxin A should only be started if a patient has been trained in clean intermittent catheterisation and has performed the technique successfully, and is able and willing to perform clean intermittent catheterisation on a regular basis for as long as needed.
- NICE recommends a dose of 200 units when offering botulinum toxin A but 100 units of botulinum toxin A could be considered for patients who prefer a dose with a lower chance of catheterisation and accept a reduced chance of success.
- If botulinum toxin A treatment is effective, patients should be followed up at 6 months or sooner if symptoms return for repeat treatment without an MDT referral.
- Patients should be provided with information on when to self-refer for prompt specialist review if symptoms return following a botulinum toxin A procedure. Repeat treatment should be given as necessary.
- Botulinum toxin B is NOT recommended for patients with proven detrusor overactivity.

NOCTURNAL SYMPTOMS:¹²
- Amitriptyline 25 to 50mg orally at bedtime (unlicensed in adults) OR imipramine 50-75mg orally at bedtime (unlicensed in adults)
- Consider oral desmopressin (unlicensed) to reduce nocturia in patients who find it a troublesome symptom if other medical causes have been excluded and they have not benefited from other treatments. Use particular caution in patients with cystic fibrosis and avoid in those over 65 years with cardiovascular disease or hypertension.
- Symptomatic hyponatraemia is more likely to occur soon after treatment initiation. Pre-treatment and early post-treatment (3 days after the first dose) serum sodium monitoring is recommended. If serum sodium is reduced to below the normal range, stop desmopressin treatment.
- Advise restriction of night-time intake of fluid to reduce the risk of fluid retention and water intoxication.³

ASSOCIATED CONDITIONS IN WOMEN:¹
Offer intravaginal oestrogens (but not systemic hormone replacement therapy) for the treatment of OAB symptoms in postmenopausal women with vaginal atrophy.

URINARY RETENTION DUE TO BENIGN PROSTATIC HYPERPLASIA (BPH) IN MEN:²
Treatment of Lower Urinary Tract Symptoms (LUTS) should be in accordance to NICE CG 97
- First choice Tamsulosin MR 400mcg orally once daily after food OR
- Alfuzosin 10mg orally once daily. For acute urinary retention associated with BPH for men over 65 years, 10mg once daily for 2-3 days during catheterisation and for one day after removal: max 4 days. May need to consider continuing if urinary symptoms persist.
- An antimuscarinic drug should be considered as well as an alpha blocker in men who still have storage symptoms after treatment with an alpha blocker alone.² Refer to the flow chart on the front page for recommended OAB drug choices.

Advice on fluid intake and lifestyle⁷

Fluid intake
Consider advising modification of high or low fluid intake. Both excessive and inadequate fluid intake may lead to lower urinary tract symptoms; this should be considered on an individual basis.

Lifestyle advice may include:
- A trial of caffeine reduction - there is some evidence that caffeine reduction leads to less urgency and frequency when used in addition to bladder training
- Smoking cessation
- Weight reduction if body mass index is 30 kg/m² or greater. There is evidence of an association between obesity and urinary incontinence (UI) or OAB, and in obese women weight reduction of at least 5% is associated with relief of UI symptoms

REFERENCES

Joint Wirral Guidelines for Pharmacological Management of Overactive Bladder Syndrome (OAB) in Adults in Primary Care.
Adapted from the Pan Mersey Guidelines for the Management of Overactive Bladder Syndrome in Adults.
Approved by the Medicines Clinical Guidelines Sub Committee. Date: October 2015  Review date: October 2018