

Treatment of Urinary Incontinence in women

Lifestyle interventions and advice (for stress, urge and mixed):

- Reduce caffeine intake
- Advise modification of high or low fluid intake, especially if in excess of 1.5litres/day
- Treat contributory factors such as constipation / chronic cough
- Women with a BMI greater than 30 should be advised to lose weight

A referral can be made to the Continence Service for assessment, advice and support for all stages of stress, urge and mixed urinary incontinence in both men & women (adults). GPs & nurses can send written referrals to the Continence team at RCHS

Non-pharmacological interventions:

- A bladder diary (minimum of 3 days) should be used in the assessment of incontinence. It will also assess the effectiveness of bladder training and other interventions.
- A trial of supervised pelvic floor muscle training of at least 3 months' duration should be offered as first-line treatment to women with **stress or mixed** urinary incontinence
 - Training programmes should be at least 8 contractions performed 3 times a day
- Bladder training lasting for a minimum of 6 weeks should be offered as first-line treatment to women with **urge or mixed** urinary incontinence

Bladder Diaries and pelvic floor exercise sheets are available from Continence team (Tel. 01709 423369) or downloadable from www.bladderandbowelfoundation.org

Medication for overactive bladder and urge incontinence:

There is no clinical difference in efficacy between the different agents and if lifestyle and non-pharmacological interventions have failed, the lowest cost agent should be used unless ineffective or side-effects not tolerated. Placebo-controlled trials estimate that, as a class antimuscarinics have a very limited effect, with approximately one fewer incontinent episode and one fewer voiding episode per 48 hours.¹

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|-------------|---|
| 1st line | <ul style="list-style-type: none"> • Oxybutynin (lowest cost when standard release) <ul style="list-style-type: none"> • Initially 2.5 - 5mg BD or MR 5mg OD • Doses above 10mg daily have significantly more side-effects with little additional benefit and should NOT be used, but an alterantive tried. • Transdermal oxybutynin is suitable for patients unable to swallow tablets • Trospium MR 60mg OD (or 20mg BD if renal impairment) <ul style="list-style-type: none"> • Trospium does not penetrate the CNS and should be considered for patients with cognitive impairment or decline (i.e. dementia) or the elderly (2) • Tolterodine 2mg BD (or MR 4mg OD) |
| 2nd line | <ul style="list-style-type: none"> • Mirabegron 50mg OD <ul style="list-style-type: none"> • Only if contra-indications to antimuscarinics, OR is unable to tolerate side-effect to the 1st line agents (including trospium) |
| Limited use | <ul style="list-style-type: none"> • Solifenacin & Fesoterodine are still on patent • Solifenacin is significantly more expensive, especially at the 10mg dose |

- Counsel regarding the adverse effects of antimuscarinics. These are more common in the elderly and include: dry mouth (up to 30%), constipation, blurred vision, nausea, dyspepsia, flatulence, palpitations, arrhythmia, dizziness, insomnia and skin reactions
- Review after 4 weeks' treatment to assess the balance of beneficial and adverse effects, **the use of a bladder diary is recommended.**

- If beneficial, review treatment after 6 months to assess whether it is still needed
- Only continue treatment for as long as benefit is maintained
- Be aware that antimuscarinic drugs may affect cognitive function in elderly people (particularly if cognitive impairment is already present - for example dementia) and monitor regularly for this
- **Do NOT use antimuscarinics for stress incontinence**

Mirabegron ▼ (NICE TA 290 June 2013)

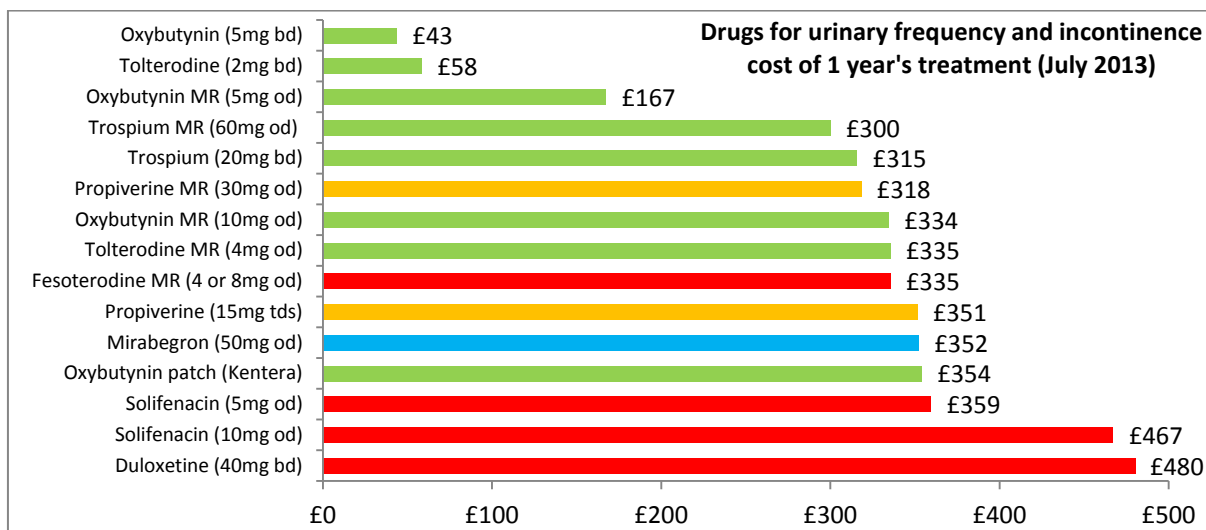
- Mirabegron ▼ is a beta-3-adrenoceptor agonist, and activates receptors causing the bladder to relax, which help it fill and store urine. It has shown similar efficacy to antimuscarinics (**but is not superior**)
- It has a different side-effect profile to the antimuscarinics, and is a black triangle ▼ drug and therefore any side-effects need reporting through the yellow card system
- The manufactures quote tachycardia (2.9%) and urinary tract infections (1.2%) as common side-effects, and atrial fibrillation (0.2%) as a serious adverse reaction. Blood pressure and LFTs can be increased, as well as uncommon skin, GI and joint effects.

Other medications:

- **Propiverine** can be considered as an option to treat frequency of urination in women with overactive bladder but is not recommended for urinary incontinence
- **Desmopressin** may be considered specifically to reduce nocturia in women with urinary incontinence or overactive bladder (Outside the UK licence)
- **Duloxetine** is **NOT** recommended as a first-line treatment for women with stress incontinence. Although it may be offered second-line if women prefer pharmacological to surgical treatment. Women should be counselled about its adverse effects.

NICE guidance - Urinary incontinence (CG171) – September 2013

Immediate release generic oxybutynin or tolterodine should be offered to women with overactive bladder syndrome or mixed urinary incontinence as first-line drug treatment. Do not offer immediate release oxybutynin to frail older women.



In addition to current costs, patent expiries should be considered. Oxybutynin, trospium & tolterodine are off patent. Solifenacin expires in Dec 2015, but fesoterodine will be on patent till April 2022, and mirabegron ▼ has only been recently launched in 2013.

Fesoterodine is a pro-drug which is hydrolysed to the same active metabolite as tolterodine, and is shown to have similar adverse effects to the other antimuscarinics, and not been shown to be as or more effective than the other antimuscarinic agents³

1. Herbison P, Hay-Smith J, Ellis G, Moore K. Effectiveness of anticholinergic drugs compared with placebo in the treatment of overactive bladder: systematic review. *BMJ*. 2003;326:841–844
2. Staskin D. Trospium chloride has no effect on memory testing and is assay undetectable in the central nervous system of older patients with overactive bladder. *Int J Clin Pract*. 2010 Aug;64(9):1294-300. Epub 2010 Jun 17
3. Regional Drugs and Therapeutics September 2008