Treatment of Urinary Incontinence

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 1.5 litres/day
- Treat contributory factors such as constipation / chronic cough
- Women with a BMI greater than 30 should be advised to lose weight

Non-pharmacological interventions:
- A bladder diary (at least 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

Medication for overactive bladder and urge incontinence:

<table>
<thead>
<tr>
<th>1st line</th>
<th>2nd line</th>
<th>Limited use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolterodine 2mg BD (or Neditol MR 4mg OD)</td>
<td>Mirabegron ▼ 50mg OD</td>
<td>• Solifenacitin &amp; Fesoterodine. Both are on patent and Solifenacitin is significantly more expensive, especially at the 10mg dose.</td>
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<tr>
<td>Trospium MR 60mg OD (or 20mg BD if renal impairment)</td>
<td>Only if contra-indications to antimuscarincs, OR is unable to tolerate side-effect to the 1st line agents (including trospium)</td>
<td>Combination products should be avoided as there are none containing recommended drugs</td>
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- Review after 4 weeks' treatment to assess the balance of beneficial and adverse effects, **the use of a bladder diary is recommended**.
- Review treatment every 6 months to assess whether it is still needed and only continue treatment for as long as benefit is maintained

Medication for men with obstructive symptoms as well:

i.e. Poor stream, hesitancy & straining and incomplete emptying

- Treat obstructive symptoms for 6 weeks first, and then add in tolterodine / trospium as above

<table>
<thead>
<tr>
<th>Small prostate (PSA &lt;1.4)</th>
<th>Large prostate (PSA &gt;1.4)</th>
</tr>
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<tbody>
<tr>
<td>Tamsulosin 400microgram MR OD review at 6 to 8 weeks</td>
<td>Finasteride 5mg OD review at 3 to 6 months</td>
</tr>
</tbody>
</table>

See Urology Top tips for when to refer men with worrying Lower Urinary Tract Symptoms

Eloise Summerfield, Medicines Management Team, NHS Rotherham
Review: May 2017
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 duloxetine may be offered second-line, if a woman prefers pharmacological to surgical treatment. Women should be counselled about its adverse effects.

**Antimuscarinics Information:**
- Counsel regarding the adverse effects. 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.
- Antimuscarinic drugs may affect cognitive function in elderly people (particularly if cognitive impairment is already present – e.g. dementia) and monitor regularly for this.
- There is no clinical difference in efficacy between the different agents. 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.
- 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 has not been shown to be as or more effective than the other antimuscarinic agents.
- **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 manufacturers 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.

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.