

Medications Used to Treat Bladder Dysfunction

Assessment

- It is important to know what medication an individual is taking, as many drugs can affect the rate of urine production or bladder and/or bowel function

See Information Leaflets: -

- Medication Impact on the Bladder

- Medication Impact on the Bowel

- Constipation and Laxatives

- Medication can also worsen constipation and thus worsen urge or overflow incontinence
- Information relating to all medication can be found in the BNF
- It is vital to be aware of what prescribed and non-prescribed medication an individual is taking, as bladder and bowel symptoms can be a side-effect of medication
- Older people often take medications which are prescribed for a variety of conditions which have the potential to interact and cause side effects
- Before prescribing or recommending medication, the prescriber must be aware of a person's current medication so as to avoid drug errors or interactions

Medications Commonly used to Treat Urge Incontinence

- If bladder training is unsuccessful, medication is recommended
- NICE recommends immediate-release oxybutinin as the first line treatment if bladder training has been ineffective – **oxybutinin should be avoided in the over 65 age group.**
- However, some of the newer, extended release anti-muscarinics (also known as anti-cholinergics) are reported to have a lower side effect profile
- In women with symptoms of urgency, frequency and nocturia who also have vaginal atrophy, topical oestrogen may be of benefit

Anti-Muscarinic Medication

- Anti-muscarinic medication can reduce the sensation of urgency and unwanted bladder contractions
- Anti-muscarinics act by blocking nerves that control detrusor muscle contractions and allow relaxation of the bladder's smooth muscle
- A bladder scan should be carried out prior to prescribing anti-muscarinic medication, to ensure the bladder is emptying correctly.
- 6-8 weeks after commencing anti-muscarinics, a bladder scan should be repeated.

Examples of anti-muscarinic medication are: -

- Oxybutinin: ***should not be offered to people over the age of 65***
 - Tolterodine
 - Darifenacin
 - Fesoteridone
 - Solifenacin
 - Trospium Chloride
- Common side-effects include dry mouth, dry eyes, constipation and gastric disturbances
 - Caution is necessary in frail older people as cognitive function may be affected
 - Agree a review date and ask the individual to complete a bladder diary for at least 3 days prior to review
 - This is an essential part of monitoring progress
 - Doctors are advised to calculate the individual's overall anti-cholinergic load or burden when considering prescribing an anti-muscarinic, especially in older people who are already on a number of medications. More information can be found here: <http://www.polypharmacy.scot.nhs.uk/hot-topics/anticholinergics/>

Mirabegron

Mirabegron (Betmiga) is a beta-3-adrenoceptor agonist and causes the bladder muscle to relax, allowing it to fill and store urine. NICE recommend this when anti-muscarinics are contra-indicated or ineffective, or have unacceptable side effects.

More information can be found in NICE guidance – **Mirabegron for treating symptoms of overactive bladder**

<https://www.nice.org.uk/guidance/ta290>

Medications for Treatment of Benign Prostatic Hyperplasia

- Tamsulosin – helps with bladder emptying by relaxing the muscles in the bladder neck
- Finasteride – can cause prostate gland to reduce in size

Management of Severe Urge Urinary Incontinence

- If symptoms of urge urinary incontinence fail to respond to conservative therapies and medication, referral to a hospital consultant may be indicated
- Botox is a new and effective treatment for the management of severe urge incontinence
- It is injected using a cystoscope into various points of the bladder wall and works by partially paralysing the detrusor muscle, thus eliminating excessive detrusor contractions
- The effect is temporary and may need to be repeated
- Individuals should be advised that the bladder may not empty following the procedure and that they need to self-catheterise
- Botox is not yet licensed for use in the bladder, but is being widely used with much success
- In severe cases, augmentation or sacral nerve stimulation surgery may be considered