

Medications for an Overactive Bladder

Overactive bladder is a condition where there is urgency (sudden and compelling desire to pass urine, which is difficult to defer), usually with frequency (more than eight voids per day) and nocturia (waking to void more than once at night). It occurs with or without urge incontinence (involuntary leakage of urine with the feeling of urgency) in the absence of urine infection or other bladder irritation.

1. Anticholinergic Medications

Anticholinergic drugs are used for treating an overactive bladder. They block special receptors (signalling systems) at the detrusor (bladder) muscle reducing bladder contractions and therefore the urge to pass urine and wetting episodes associated with this.

As no anticholinergic drugs are totally selective for the bladder, side effects from blocking the signals in other sites in the body are common. New drugs with greater bladder selectivity and extended-release preparations are being developed to try to reduce these adverse effects. Most of the newer drugs have similar efficacy or work as well, in reducing the symptoms of overactive bladder but have less side effects. They can improve symptoms within 2 weeks, you may need to try them for 4 weeks to really know if they help. The most effective way to use these drugs is in conjunction with bladder retraining. You will be referred to a specialist physiotherapist for this training.

When anticholinergic drugs block muscarinic receptors in the salivary gland, gut, brain and heart side effects result including dry mouth, dry eyes, confusion, constipation, sleepiness, blurred vision and increased heart rate. None of the currently available drugs only affect the bladder so all have some other side effects. People with glaucoma or certain types of kidney, liver, stomach, and urinary problems are advised not to take anticholinergics.

Oxybutynin

Oxybutynin (Ditropan) is the most widely used anticholinergic for overactive bladder. Early studies showed a major clinical benefit in 60% of patients (versus 3% of those on placebo). Dry mouth is the most bothersome and frequent adverse effect (greater than 50%). The tablet is 5mg and you will usually start on 2.5mg or half a tablet in morning and night and build the dose up slowly to a maximum of 5mg three times a day. One can increase a morning dose, or add a lunchtime dose, according to the severity and timing of the urge symptoms. On the other hand, if you have a very dry mouth in the morning, then a lower dose with a larger evening dose can be used. The maximum dose is 5mg three times daily. It is comparatively cheap and on the PBS drug list. Although there is no evidence that Ditropan causes birth defects, pregnant women should not take it without consulting a physician.

Oxytrol is the Oxybutynin patch. It has the benefit of being broken down differently in the body due to the way the drug passes through the skin and not the gut. This means less dry mouth. It is a good place to start with treatment. The patch can produce a rash at the site. It needs to be applied twice weekly (for example Monday and Thursday) and the site should be moved each time around the upper buttocks or lower abdominal area. Take care to remove all the gum once it is off at each site as this may contribute to the rash occurring. It is a good idea to put baby oil on the skin, let it dry and then apply the patch.

Darifenacin & Solifenacin

Both of these drugs are MORE selective for the bladder signally pathways and so are associated with less side effects. Darafenacin (Enablex) may still have associated constipation and dry mouth but less and heart and cognitive (“thinking”) side effects. The dose is started at 7.5mg daily and then increased to 15mg after about 10 days if required.

Solifenacin (Vesicare) is also selective and once daily dosing. It is started at 5mg and increased to 10mg if required. BOTH Solifenacin and Darafenacin are not on the PBS and so a private script will cost between \$40 and \$55 per month depending on the pharmacy. Sometimes to gauge the best effect with the minimum of side effects, you can trial a month of one of these two medicines to see how much your bladder improves before assessing the ongoing cost.

2. Mirabegron (Betmiga)

Mirabegron works through a different pathway to the anticholinergics and has less side effects related to dry mouth and poor bladder emptying as a result. It is an excellent medication to begin with but is not on the PBS so it is expensive.

I will give you a 10 day starter pack 25mg dose. Take this to ensure you don't have an unexpected reaction or side effect. Then if not and you can afford to, try the 50mg tablet by filling the script.

After 2 weeks on 50mg you need to have your blood pressure checked by the GP, the chemist or on your own home machine. It is RARE for Mirabegron to elevate blood pressure. If it does you will have to stop it.

It takes 4-6 weeks to really have an effect. It can be combined with an anticholinergic for better effect and I usually suggest the Oxytrol patch as it is on the PBS.

You can **halve** Mirabegron or the Solifenacin 10mg to lessen the cost or take **either** second daily.

Medication management of overactive bladder takes a lot of trial and error and patience. Please let me know if you have any questions.

If medications do not work, there are other excellent options to discuss.

Remember, *the most effective way to use these drugs is in conjunction with bladder retraining.*