

Anticholinergic medications for an overactive bladder

Anticholinergic drugs are the first choice of medicines used for treating an overactive bladder. They block special receptors (signaling 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. 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.

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.

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 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 morning dose with a larger evening dose can be used. The maximum dose is 5 mg 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 Oxybutinin 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.

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 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.

Imipramine

Imipramine is a tricyclic antidepressant that relaxes the dome (top) of the bladder muscle, but it also has significant anticholinergic effects. Drowsiness is common, especially in the first three weeks of therapy while a steady state concentration is achieved. Imipramine may therefore be useful for treating nocturia or nocturnal enuresis.

Medications are a common, safe way to control overactive bladder or to treat the underlying cause of urinary problems. Several factors must be considered in selecting an appropriate medication. Your doctor will need to consider the cause of bladder symptoms and the type of urinary incontinence, as well as factor in your age, general health and any medication you may already be taking. Your doctor should be consulted to review potential side effects and overall safety profile as well as efficacy.

Remember, *the most effective way to use these drugs is in conjunction with bladder retraining.* Please contact me if you have any questions.

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