

Overview of Urinary Incontinence non Pharmacological and Pharmacological Treatment



Urinary incontinence (UI) is a wide spectrum of different conditions leading to an “involuntary loss of urine”. The prevalence of incontinence in Canada is estimated at 17.3% in women and 3.4% in men. The prevalence and severity of UI increases with age and has been reported to occur in 40% to 79% of long-term care facility patients. Decubitus ulcers, infection (UTI, sepsis), renal failure, depression and decreased socialization may result from urinary incontinence. Treatment involves many steps starting from history and evaluation to non-drug measures, drug therapy, procedures and surgery (Appendix 1).

Medical conditions and medications can result in transient UI or exacerbate transient or chronic UI. Medical conditions leading to transient UI include cystitis, atrophic vaginitis, urethritis, heart failure, stool impaction and immobility. The mnemonic DIAPPERS is frequently used to identify common transient or reversible causes. (Appendix 2) There are also seventeen medication classes that can cause or exacerbate UI. (Appendix 3)

The first Canadian Guidelines for managing adult urinary incontinence came to light in 2005 and can be accessed at www.cua.org (choose guidelines). The non-pharmacologic & pharmacologic treatment is based on the reliable diagnosis of the type of UI. Medications most effective for one type of UI may worsen another type.

The following table summarizes the available drugs, their dosage and the level of evidence of their efficacy.

Treatment	Indications	Generic Name	Brand Name	Starting Dose	Maximal Dose	Clinical Evidence	ODB Coverage
First line	OAB	oxybutynin ER	Ditropan XL®	5 mg o.d.	10 mg o.d.	proven	not covered
	OAB	tolterodine ER	Detrol LA	2 mg o.d.	4 mg o.d.	proven	covered with LU 290
Second line	OAB	tolterodine L-tartrate	Detrol™	2 mg o.d.	2 mg b.i.d.	proven	covered with LU 290
	OAB	oxybutynin chloride	Ditropan®	2.5 mg t.i.d.	5 mg q.i.d.	proven	covered
Specific indications	OAB	propantheline bromide	Pro-Banthine®	7.5 mg t.i.d.	15 mg q.i.d.	proven	not covered
	OAB, SUI	imipramine HCL	Tofranil®	25 mg h.s.	25 mg t.i.d.	suggested	covered
	SUI	estrogens				suggested	dependent of formula
Optional	OAB	flavoxate HCL	Urispas®	200 mg t.i.d.	400 mg q.i.d.	unproven	not covered

Urinary incontinence Guidelines from Canadian Urology Association
OAB = Over Active Bladder, SUI Stress Urinary incontinence

Causes of temporary incontinence

- Alcohol, caffeine and other diuretics
- Drinking too much liquid
- Urinary tract/bladder infections
- Bladder irritants like carbonated drinks, citrus fruits and juices and artificial sweeteners
- Medications including sedatives, diuretics, muscle relaxants, antidepressants, blood pressure drugs, heart medications and cold medicines
- Constipation

Source, Canadian continence foundation

If you have requests, suggestions or comments for future issues, your feedback may be directed to suzie@medicalartsparmacy.ca

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When anticholinergics are indicated, the prescription of long acting formulations (Oxybutynin XL (Ditropan XL) or Tolterodine LA (Detrol LA)) is preferable over the immediate released ones. This recommendation is based mainly on their better side effect profiles (mainly less “anticholinergic effects” depending on the formulation) and their “one pill a day” presentation. Anticholinergic effects are being defined as dry mouth, constipation, cognitive dysfunction, tachycardia. The Ministry of Health, Ontario Drug Benefit suggests the use of short-acting Oxybutynin prescribed for a reasonable time at a reasonable dose before using Tolterodine.

Newer drugs for overactive bladder have not been added to the guidelines yet. When reimbursement is not an issue they may be considered in the treatment of overactive bladder.

Class	Drug	Dose	Adverse effects	Comments	*Cost/month
anticholinergic	Darifenacin extended-release (Enablex)	7.5mg day; after 2 weeks may increase to 15mg daily if necessary	Primarily anticholinergic effects	Avoid in patients with severe hepatic insufficiency	\$55.00/30 tablets
anticholinergic	Oxybutynin, transdermal patch (oxytrol)	1 patch applied twice weekly (alternating sites); delivers 3.9mg per day	Primarily anticholinergic effects	In older adults prescribe the lowest recommended starting dose	\$56.60/8 patches
anticholinergic	Solfenacin (Vesicare)	5mg daily; may increase to 10mg daily if tolerated	Primarily anticholinergic effects	Avoid in patients with hepatic insufficiency	\$56.83/30 tablets
anticholinergic	Tropium (Trosec)	20mg BID on an empty stomach or 1 h before meals. In older adults an initial dose of 20mg HS is recommended	Primarily anticholinergic effects		\$55.00/60 tablets

*cost of 30 days supply; includes drug cost only.

Tips for Treatment

Before recommending drug therapy, suggest lifestyle changes.

Surgical intervention should be considered for patients with stress or overflow incontinence or those who have a lower urinary tract pathology contributing to Urinary Incontinence.

A combination of behavioural and pharmacologic therapy is often more effective than either therapy alone and may permit the use of a lower medication dose, with less potential for adverse drug reaction and decreased drug costs.

Maximum response for some medication is one to two weeks (e.g. Oxybutynin), 5 to 8 weeks for Tolterodine, and 6 to 12 weeks for estrogen.

Behavioral Signals of Dementia in Retirement Living and LTC

Very informative evening! Dr. Dalziel emphasized anticholinergic medications for those with anticholinergic effects can contribute to confusion and further impaired cognitive status in patients with Alzheimer's Disease.

What about you?

I would appreciate receiving your comments and suggestions for further presentations.

Hope to hear from you at suzie@medicalartsparmacy.ca

The newsletters can be found at www.medicalartsparmacy.ca



Healthy bladder habits

- Avoid bladder irritants (e.g. caffeinated beverage and alcohol)
- Eat more Fiber to avoid constipation
- Maintain a healthy weight
- Stay active and mobile
- Don't smoke
- Empty your bladder every three to four hours during the day and before going to sleep
- Drink moderate amounts of fluid (six to eight glasses per day)
- Talk to your doctor about urine loss or other bladder symptoms. There's no reason to wait!

Source, Canadian Continence foundation.