

Urinary Incontinence: Practical Office Management



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Urinary incontinence is a significant health and quality of life issue which is placing an increasing burden on patients, their families, caregivers and the Canadian health system. Primary care physicians can offer management advice to assist patients with their problem.

Types of urinary incontinence

Urinary incontinence is classified into types, but often exists as a mixed clinical picture:

- **Urge incontinence:** a loss of urine associated with a sudden urge to void (see the overactive bladder [OAB] section below)
- **Stress incontinence:** a loss of urine with changes in intra-abdominal pressure
- **Mixed incontinence:** has symptoms of both urge and stress incontinence
- **Overflow incontinence:** relates to leaking associated with a distended bladder
- **Functional incontinence:** presents itself when there are alterations in the patient's environment that prevent timely access to a washroom (e.g., a hospitalized patient just having undergone hip replacement surgery who is receiving pain medication, has restricted mobility, shares a hospital room with two other patients and is shy to ask for nursing assistance)

Marjorie's case

Marjorie, 40, an otherwise healthy mother of 2 reports increasing symptoms of urgency, daytime frequency and occasional urge incontinence. She rarely leaks with coughing, sneezing or physical activity.

Examination

An examination reveals no clinical evidence of bladder distention or pelvic organ prolapse. Marjorie's cursory neurological examination is normal. Her creatinine, glucose and urinalysis are all normal as well.

For Marjorie's management, turn to page 98.

OAB is a very common condition, one of the top five chronic medical conditions in North America.

OAB

OAB is defined as urgency, with or without urge incontinence, usually paired with frequency and nocturia and is absent of local or endocrine conditions that might otherwise

Marjorie's case cont'd...

Management

Marjorie's profile typifies the clinical diagnosis of overactive bladder. Management should include:

- reduction of fluid intake (especially caffeinated beverages),
- timed voiding to pre-empt the urgency and
- pelvic floor exercises to help her use her pelvic muscles to assist with inhibition of overactive bladder contractions.

Referral to a trained physiotherapist might be of benefit. If simple measures fail and Marjorie finds the urgency to be bothersome and affecting her quality of life, one could consider treatment with a long-acting anticholinergic. Urodynamic testing and/or cystoscopy are not initially indicated.

explain these symptoms. This is not to be confused with detrusor overactivity, which is a urodynamic diagnosis based on the presence of uninhibited bladder contractions occurring during bladder filling with a cystometrogram. OAB can be subclassified (indicating whether or not incontinence occurs) as:

- OAB-dry and
- OAB-wet.

OAB is a very common condition, one of the top five chronic medical conditions in North America (excluding hypertension); its clinical diagnosis does not require urological testing.



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Evaluation of urinary incontinence

Patients with urinary incontinence require a careful history, including:

- a clear elucidation of symptoms,
- abdominal, pelvic or urinary tract surgery,
- medications,
- parity,
- treatment with radiation or chemotherapy and
- neurological disease.

Physical examination

A physical examination should include the abdomen and pelvis, an assessment of pelvic support and atrophy in the female, along with a digital rectal examination in males. A microscopic urinalysis must be done to exclude:

- hematuria,
- glycosuria,
- pyuria and
- bacteriuria.

The bladder's ability to empty adequately can be assessed by ultrasound although it is important that the patient not be excessively fluid-loaded, or a high residual false-positive might result. Avoiding dairy is helpful as it indicates not only what type and volume of fluids the patient is drinking, but also the degree of frequency and voided volumes.

Management

If the urinalysis is negative and a urinary tract infection is excluded, the initial management of incontinence is similar for both sexes. Initial treatment is behavioural, meaning patients should be educated about food and fluids that affect urine production and bladder activity.

Patients should:

- avoid drinking fluids in the evening,
- avoid caffeinated beverages and
- be instructed to empty their bladder on a regularly-timed basis.

The time between voids can be increased as improvement occurs. Pelvic floor exercises may be useful to increase extrinsic compression of the urethra in mild-to-moderate stress incontinence and may assist in inhibiting urgency.

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The assistance of a trained physiotherapist can be useful as they provide education and assistance in pelvic floor re-education using adjunctive methods such as biofeedback and electrical stimulation, when necessary. The treatment of functional incontinence is often multi-factorial and engenders making the patient's environment more "bladder-friendly."

Bladder outlet obstruction

Bladder outlet obstruction can cause symptoms of OAB. If there are concerns about bladder outlet obstruction, high post-void residuals or worsening of symptoms following behavioural intervention, then these patients may need to be referred for a more detailed evaluation.

Frequently Asked Questions

1. When should I refer incontinent patients to a specialist?

When there is:

- Associated hematuria
- Possibility of prostate cancer
- Symptomatic pelvic organ prolapse
- Overflow incontinence or retention
- Recurrent urinary tract infection
- Failure of empiric therapy

2. What anticholinergic drugs are currently available in Canada?

The following are currently available in Canada:

- Oxybutynin (pill or transdermal patch)
- Tolterodine
- Trospium chloride
- Solifenacin
- Darifenacin

3. What are possible contraindications to anticholinergic drugs?

Possible contraindications include:

- Glaucoma
- Untreated thyroid disease
- Reflux/ulcer disease
- Significant urinary retention
- Severe constipation
- Confusion, dementia, cognitive disorder

4. Can I differentiate bladder outlet obstruction from overactive bladder?

This may be difficult without urological testing. Post-void residual volume is not discriminatory. A large prostate in men or, significant pelvic organ prolapse in women may be a clue. A referral for evaluation is likely required

Drug therapy

There are a number of anticholinergic (specifically antimuscarinic) medications now available to help with urinary incontinence. The newer drugs are taken once daily and can be

very helpful. Nonetheless, they still have a cadre of possible adverse effects since they are not bladder-specific. Side-effects and drug interactions must be considered before prescribing. When effective, anticholinergics:

- reduce frequency,
- delay urgency thereby increasing warning-time and
- increase functional bladder capacity and voided volume.

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Invasive and surgical management

Should behavioural management fail to help women with stress incontinence, referral for consideration of various types of urethral sling procedures is appropriate. The artificial urinary sphincter, or male sling, is a consideration for post-prostatectomy stress incontinence in men.

For refractory OAB, injection of intravesical botulinum toxin shows promise. Further evaluation for safety and efficacy is required. Neuromodulation is available in very few centres, but may be a consideration if all else fails and the patient is willing to undergo screening with percutaneous sacral nerve stimulation. This should only be done by urologists trained in this technology.

Augmentation enterocystoplasty and urinary diversion are last resorts, infrequently indicated in non-neurogenic urinary incontinence.

Conclusion

Urinary incontinence is a highly prevalent condition causing tremendous quality of life issues for patients and costs for the healthcare system. Simple non-invasive management steps are often forgotten and can significantly improve the problem in some patients. Multi-modal therapy, including behavioural management, patient education and possibly the use of medications gives better results than a single intervention. 

Suggested reading

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