Incontinence in the Elderly:
The Overactive Bladder

Leo Winter, MD, FRCSC

Presented at McMaster University's Half-Day in Urology, Hamilton, Ontario, April 2007.

Incontinence in the elderly

Incontinence in the elderly is a common problem. Estimates of its prevalence range between 15% and 30% for both men and women > 65-years-of-age.[1] It is more common in women and in institutionalized individuals of both sexes.[2] It is nearly always associated with idiopathic bladder overactivity in older age groups.[3] By the time they reach retirement age, women with stress incontinence have either had surgery to correct the problem, or no longer are active enough to suffer significant symptoms from it. Men have usually had their prostatism-associated overactive bladder (OAB) treated by the time they reach the age of 65.

Idiopathic bladder overactivity

Idiopathic bladder overactivity is believed to be associated with the degeneration of the central nervous system that is associated with the aging process. It results in bladder contractions which cause the sensation of an urgent need to void. Associated symptoms are:

- frequency,
- nocturia,
- hesitancy,
- post-void dribble and
- incontinence.

Stephanie's case

Stephanie, 81, presents with her husband, Steve, who brings her complaining that ever since she was admitted to a nursing home, she has had urine incontinence. She has become depressed and withdrawn because of this and is very unhappy there. Steve feels very guilty about having placed her in a nursing home, but he was unable to look after her due to his own frail health.

Examination

Stephanie has limited mobility and needs to use a walker as she broke her hip 4 months ago. She cannot walk for more than a dozen feet before she tires. Steve would accompany her to the bathroom morning and night when she lived at home. She was never more than a few feet away from a bathroom in their small apartment.

Stephanie has Type 2 diabetes treated with diet control and oral hypoglycemics. Steve cooked all their food and strictly followed the recommended diabetic diet plan. He also checked her blood sugar 4 times per day.

Stephanie has been noted to be forgetful and easily confused in the last 6 months.

Continue reading for more on Stephanie.

Incontinence in the elderly is a common problem.

Stephanie's case cont'd...

Management

You recognize that Stephanie's recent development of incontinence can be attributed to aggravation of pre-existing bladder overactivity that was being managed well at home by her husband.

You send the following instructions to Stephanie's nursing home:

- Limit fluid intake to 1,500 cc q.d.
- No caffeine-containing liquids
- Strict diabetic diet
- Toilet every 3 hours while awake
- Keep a commode chair next to the bed at night
- Keep an intake/output record including incontinent episodes
- Arrange for a urinalysis and urine culture to be done
- Monitor blood sugars every 6 hours and have them report to you if results are abnormal

Follow-up

Stephanie returns with her husband 1 month later.

The report from her nursing home indicates that her incontinent episodes occur infrequently now and only at night, when she must use the commode chair on her own. She is generally happier about living at the nursing home and is participating more in the social activities there.

You decide that she does not require medication for her overactive bladder (OAB) at this time and arrange to see her again in 3 months.

Dr. Winter is an Assistant Professor of Surgery, Degroote School of Medicine, McMaster University, Hamilton, Ontario.

Estimates of the prevalence of OAB range between 15% and 30% for both men and women > 65-years-of-age.

Consequences of bladder overactivity

OAB causing incontinence has a tremendous impact on the quality of life for affected individuals. It may lead to depression, social withdrawal and, in many cases, results in the institutionalization of the elderly.

Factors affecting OAB

Factors which aggravate bladder overactivity include:

- overdrinking,
- use of caffeine-containing liquids,
- poor mobility/lack of an easily accessible bathroom,
- cognitive impairment,
- urinary tract disorders (*e.g.*, urinary tract infection, bladder tumours, bladder stones),
- prostatism,
- neurologic disease (*e.g.*, Parkinson's disease, stroke),
- poorly controlled diabetes or congestive heart failure and
- use of diuretics.

Table 1
Medications used in treating OAB

Medication	Dose in the elderly	Side-effects
Oxybutynin	2.5 mg b.i.d.	Dry mouth, confusion
Tolterodine	2 mg b.i.d.	Dry mouth
Darifenacin	7.5 mg q.d.	Dry mouth, constipation
Solifenacin	5 mg q.d.	Dry mouth, constipation
Trospium	20 mg q.d.	Dry mouth, constipation

Treatment

OAB treatment includes lifestyle changes, like:

- Limiting liquid intake to 1,500 cc (six cups) q.d.
- Avoiding caffeine/drinking only decaf coffee or decaf/herbal tea
- Improving access to a toilet
- Performing pelvic floor exercises if patient is not cognitively impaired
- Voiding should be timed if patient is cognitively impaired
- Most urinary tract disorders can be ruled out by urinalysis and culture
- Consult with a urologist in men who have not previously been treated for prostatism
- Control diabetes as well as possible
- Avoid diuretic use. If diuretics are necessary, administer in the morning

Take-home message

- An OAB is the main cause of incontinence in the elderly
- Avoiding factors which aggravate the symptoms of OAB is the mainstay of maintaining continence in the elderly

Medications which may help to treat OAB are listed in Table 1.

OAB is more common in women and in institutionalized individuals of both sexes.

The treatment of OAB in the elderly currently taking prescription medication is complicated by poor tolerance to anticholinergic medication.[4] Therefore, lifestyle modification is a critical component in the effort to maintain continence in the older individual.[5] Dx

References
1. Johnson T, Ouslander J: Urinary Incontinence in the Older Man. Med Clin North Am 1999; 83(5):1247-66.
2. Erdem N, Chu FM: Management of Overactive Bladder and Urge Urinary Incontinence in the Elderly Patient. Am J Med 2006; 119(3 Suppl 1):29-36.
3 Pfisterer MH, Griffiths DJ, Schaefer W, et al: The Effect of Age on Lower Urinary Tract Function: A Study in Women. J Am Geriatr Soc 2006; 54(3):405-12.
4. Staskin D: Overactive Bladder in the Elderly: A Guide to Pharmacological Management. Drugs Aging 2005; 22(12):1013-28.
5. Keilman L: Urinary Incontinence: Basic Evaluation and Management in the Primary Care Office. Prim Care 2005; 32(3):699-722.