

# Dealing with urinary incontinence in the elderly

Commentary by

**CLARE MATTHEWS** MB ChB, FRACGP

**ANNABELLE SHANNON** MB BS, DRCOG

An elderly man has had urinary

incontinence for 10 years.

How should he be managed?

## Case scenario

Tom is 81 years old and has presented with a 10-year history of urgency and urge incontinence. He also has some mild stress incontinence and nocturia. He has been treated with prazosin (1 mg twice daily) with little effect. He takes a laxative with faecal softener to keep his constipation at bay. He underwent transurethral resection of the prostate a few years ago and abdominal aortic artery endoluminal stenting last year. A voiding diary shows small, frequent volumes in the day and small to moderate volumes overnight. He suffers incontinence four to five times a week. He lives with his elderly wife and is cognitively intact and still physically active. He has no cardiorespiratory adverse signs. His prostate is slightly enlarged but smooth, and his rectal tone is normal. How should he be managed?

## Commentary

Urinary incontinence is frequently underdiagnosed and undermanaged, causing significant social and physical morbidity.

Dr Matthews is GP Consultant to the Australian GP Continence Education Program and Hospital Liaison GP at Osborne Park Hospital, Perth; Dr Shannon is a Continence Physician at the Hollywood Continence Service, Hollywood Specialist Centre, Nedlands, WA.

There is good evidence that screening for incontinence in the elderly is worthwhile; many cases can be successfully treated. Good management can make an enormous impact on quality of life and can be the deciding factor in whether an elderly person ends up in institutionalised care or not.

The prevalence of urinary incontinence in men is 7 to 15%.<sup>1,2</sup> Although this is less than the figure for women, it still represents a large proportion of the population.

The elderly population is disproportionately affected by incontinence. The combination of a higher prevalence and incidence of other serious medical conditions and polypharmacy complicates management. The elderly are also unlikely to seek help for incontinence, all too frequently attributing it to 'just getting old'. This view is often reinforced by medical professionals and media advertising.

## Clinical assessment

Symptoms alone are not a reliable means of diagnosing the cause of urinary incontinence in men. Careful clinical assessment is the lynchpin of successful management.

In addition to noting the characteristics of the incontinence, it is important to assess the patient's mobility, home environment, cognitive status and medication use. Transient causes of incontinence should be ruled out early on. A useful guide is to use the mnemonic DIAPPERS presented in the box on this page.

Physical examination should focus on the following:

- abdominal examination to rule out masses or organomegaly
- rectal examination to assess perineal sensation, sphincter tone, faecal impaction, rectal masses and prostatic enlargement
- genital examination looking for abnormalities of the penis or foreskin.
- general examination such as blood pressure and cardiovascular status, which will have relevance when considering treatment.

## Investigation

Testing of the urine by urinalysis and an MSU is mandatory. Infection, renal disease, haematuria and diabetes need to be excluded.

A bladder diary, which records intake, output and any leakage, may help to elucidate the history more clearly and help to judge whether any treatment strategies are having an impact. The sample bladder diary on page 66, recorded before and after three months of treatment, demonstrates reduced voiding frequency with larger volumes, only occasional nocturia and no incontinence after treatment.

A cough stress test may help to indicate if there is a component of stress incontinence.

Ultrasound estimation of postvoid residual urine volume will indicate if overflow incontinence is present. If the residual urine volume is 100 to 400 mL, repeat the test; if it is greater than 400 mL, overflow is present. Investigation may then include renal and bladder ultrasound and urea and creatinine estimation. Urinary flow cytometry may be necessary to further demonstrate the type of incontinence. This is usually a specialist test.

## Red flags

Factors that should indicate consideration for specialist management include:

- pain
- haematuria
- recurrent infection

## Potential causes of transient incontinence<sup>3</sup>

- D Delirium
- I Infection
- A Atrophic urethritis and vaginitis
- P Pharmaceuticals
- P Psychological problems, especially severe depression
- E Excess urine output (e.g. due to congestive heart failure or hyperglycaemia)
- R Restricted mobility
- S Stool impaction

continued

- prostatic mass or enlargement
- significant postvoid residual urine volume.

**Management**

The management strategies employed will vary considerably depending on the type of incontinence diagnosed. In men, overflow incontinence and urge incontinence are more common. Stress incontinence is usually found only after surgery when there has been sphincter damage.

The most simple option of padding or external collection devices should not be the first treatment choice. Long term pad use is a deterrent to functional continence, doing nothing to treat the underlying cause and imposing a significant

financial and emotional burden.

Urge incontinence – which often presents with frequent micturition, nocturia and involuntary loss of urine (>100 mL), with a postvoid residual volume of <100 mL – can be managed with lifestyle changes such as weight loss, adequate fluid intake and behavioural strategies such as bladder training and pelvic floor exercises. Anticholinergic medication, such as oxybutynin (Ditropan) and propantheline (Pro-Banthine), can offer assistance, but caution is needed when prescribing to elderly patients because side effects (e.g. postural hypotension, constipation, glaucoma and urinary retention) can be problematic. Amitriptyline (Endep, Tryptanol) and imipramine

(Melipramine, Tofranil) have desirable anticholinergic effects but may cause sedation and should be avoided in patients with cardiac disease. In the elderly remember to ‘start low and go slow’.

Adequate management of constipation is important, as is avoiding any constipating drugs. Overflow incontinence associated with a large postvoid residual urine volume needs to be tackled by a specialist because obstruction needs to be ruled out. However, the GP can ensure that anticholinergic medication is avoided and manage any constipation that may be contributing.

**What should be done in this case?**

Getting back to the case, what are our investigation and treatment strategies for this 81-year-old man?

Follow up investigations would include an MSU, a PSA and an ultrasound estimation of postvoid residual volume. If these showed no abnormalities, Tom would be sent to a continence nurse adviser who can teach him bladder training. This involves tactics to help distend the bladder by adjusting fluid intake and delaying voiding. He would also be taught pelvic floor exercises.

He could be given a careful trial of an anticholinergic (e.g. oxybutynin 2.5 mg at night, slowly increasing to 5 mg twice daily over three months). He would be seen monthly by the GP and continence nurse adviser for ongoing support and education.

If conservative management is successful, surgery can be avoided. However, if conservative measures fail, or if any of the aforementioned red flags are present, he should be referred to a specialist. **MT**

**Sample bladder diary**

Patient name: .....

Please record the amount of fluid intake (mL) at the time you drink. Also record the time and amount of urine (mL) you pass on each visit to the toilet (use a measuring jug) and any accidental passing of urine (if accidental, just estimate the amount leaked).

Time	Before treatment			After 3 months of treatment		
	Fluid input (mL)	Urine output (mL)	Accidental? (Y/N)	Fluid input (mL)	Urine output (mL)	Accidental? (Y/N)
2.00 am		200 mL	N			
3.00 am		200 mL	N			
5.00 am				250 mL	425 mL	N
6.00 am	200 mL	200 mL	Y (200 mL)			
7.00 am		100 mL	N	250 mL	200 mL	N
8.00 am				250 mL		
9.00 am	250 mL					
10.00 am		100 mL	N	300 mL	250 mL	N
Mid-day		200 mL	N	250 mL		
1.00 pm	500 mL				350 mL	N
3.00 pm	200 mL	200 mL	N	250 mL	265 mL	N
5.00 pm	200 mL			375 mL		
6.00 pm	350 mL	200 mL	N			
7.00 pm					300 mL	N
8.00 pm				250 mL	250 mL	N
9.00 pm		200 mL	N			
11.00 pm	200 mL	400 mL	Y (200 mL)			

**References**

1. DuBeau CE. Interpreting the effect of common medical conditions on voiding dysfunction in the elderly. *Urol Clin North Am* 1996; 23(1): 11-18.
2. Ouslander JG. Aging and the lower urinary tract. *Am J Med Sci* 1997; 314: 214-218.
3. Resnick NM. Geriatric incontinence. *Urol Clin North Am* 1996; 23(1): 55-73.