The importance of a thorough continence assessment

Incontinence is distressing, unpleasant and socially disruptive (Getliffe and White, 2003) and is defined as ‘the complaint of any involuntary leakage of urine’ (Abrams et al, 2002). Incontinence is a symptom of an underlying disorder and a continence assessment is essential to identify possible causes and to plan treatment or referral for specialist advice. This requires the assessment of the whole patient rather than just his or her urinary symptoms.

The assessor needs to adopt a positive and empathetic approach that motivates the patient (Colley, 1996). This article describes how a continence assessment and subsequent treatment plan enabled a patient to be actively involved in improving her urinary symptoms.

Case history Mary Sims is 56 years old and is married with one adult son. She was referred to the continence adviser by her GP who suggested that she had urge urinary incontinence (a sudden compelling desire to pass urine, which is difficult to defer). The GP had diagnosed a urinary tract infection that was treated with antibiotics.

Assessment During Ms Sims’ first visit to the continence adviser, a detailed medical and social history was discussed and recorded. She had reflux indigestion, which was treated with lansoprazole; hypertension, which was treated with doxazosin; and she had been prescribed paroxetine for depression.

Her weight had increased by 16kg over recent years. She was a non-smoker, did not drink alcohol, and was sexually active. Her husband was very supportive of her condition.

Ten years ago, Ms Sims had had a total hysterectomy and in 1997 had a lumbar disc removed due to chronic back pain. She now walks independently with crutches but has no problems with accessing the toilet at home.

We used the Bristol Stool Scale (Heaton and O’Donnell, 1994) to assess her bowel function and identified that she did not have constipation.

Urinary symptoms Ms Sims reported increased daytime frequency with urgency, and nocturia up to six times at night (Box 1). She also reported leaking urine when she coughed.

She had experienced bladder problems since her hysterectomy, and in recent years they had become much worse. As a result of her urinary symptoms, she had restricted her fluid intake to 2–3 mugs of tea in 24 hours as she thought drinking less would decrease the frequency of voids. She had been buying sanitary products to help with her leakage problem.

Physical examination A physical examination revealed no abdominal or rectal abnormalities. A vaginal examination was carried out to assess pelvic floor muscle function and detect the presence of pelvic organ prolapse.

The pelvic floor is made up of muscles, ligaments and fascia, which together form a hammock-like support at the base of the pelvis. This serves to support the abdominal and pelvic organs and helps to maintain urinary and faecal continence.

Ms Sims’ pelvic floor muscle function was assessed using the modified Oxford Scale (Laycock, 2002). The pelvic floor (PF) contraction was weak (grade 2) on the left side and moderate (grade 3) on the right.

A slight cystocele (a protrusion or prolapse of the urinary bladder through the anterior vaginal wall) and atrophic vaginitis (deficiency of oestrogen in the vaginal tissues) were noted.

Other investigations A sample of urine was tested with a urine-testing reagent stick and no abnormalities were found. A bladder ultrasound, carried out immediately after micturition, showed that Ms Sims was able to empty her bladder and there was no evidence of a residual volume of urine in the bladder.

BOX 1. DEFINITION OF TERMS

Mixed urinary incontinence – involuntary leakage associated with urgency, exertion, effort, sneezing or coughing.

Urgency – a sudden compelling desire to pass urine which is difficult to defer.

Nocturia – waking one or more times at night to void. Each voiding is preceded and followed by sleep.

Daytime frequency – the number of voidings recorded during waking hours. This includes the last voiding prior to going to sleep and the first voiding after rising in the morning.

Nocturnal polyuria – when an increased proportion of the 24-hour urine output occurs during the time the patient is in bed.

Maximum voided volume – the largest volume of urine voided during a single micturition. This is determined from a frequency/volume chart or bladder diary.

Stress urinary incontinence (SUI) – involuntary leakage on effort or exertion, or on sneezing or coughing. (Abrams et al, 2002)
Diagnosis and treatment During the vaginal examination, lax muscle in the anterior vaginal wall and pelvic floor, and oestrogen-deficient vaginal tissue, were identified. A diagnosis of mixed urinary incontinence (Box 1) was recorded. Ms Sims’ stress urinary incontinence could be related to childbirth, oestrogen deficiency, and/or current medication.

For her hypertension, she had been prescribed doxazosin, an alpha-receptor blocker. Doxazosin can cause relaxation of the smooth muscles of the bladder and urethra (by blocking alpha-receptors) which may result in the muscles in the bladder neck failing to close tightly, so exacerbating her urinary symptoms. (Doxazosin is sometimes used to treat prostatic hypertrophy in men).

Her urge urinary incontinence may have been related to low oestrogen levels. Low fluid intake and a history of pelvic surgery were other possible causes.

Treatment and management was discussed with Ms Sims and a personal care plan was agreed:

- Completion of a bladder diary, and bladder retraining;
- Pelvic floor exercises;
- Advice on fluids;
- Advice on diet;
- Review of medication by her GP;
- Review after three months.

Bladder diary A bladder diary is a useful way of ‘augmenting the symptom history and engaging the patient in trying to overcome lower urinary tract symptoms’ (Hinchcliffe et al, 2003). The amount of fluid intake and urine voided is often difficult for the patient to estimate. Ms Sims’ bladder diary showed that fluid type and the low volume consumed could be contributing to her symptoms of urge urinary incontinence.

The diary did not identify a problem with nocturnal polyuria (Box 1) but identified an occasional ‘wet episode’. Her maximum voided volume (Box 1) was 250ml, and her average fluid intake ranged between 600–800ml of tea (which contains caffeine) in 24 hours. Her last drink of the day was taken about one hour before retiring to bed.

Ms Sims was given an explanation of how the bladder works, and of the normal maximum voided volume (500ml) and normal voiding frequency (4–7 times daily). It was explained, using the information Ms Sims had recorded in the bladder diary, that both low fluid intake and caffeine could aggravate her bladder symptoms. She needed to increase her fluid intake to eight cups in 24 hours and avoid caffeine.

As bladder retraining could gradually help to increase the time between voids, and increase Ms Sims’ maximum voided volume, it was included in her care plan.

Pelvic floor exercises PF muscle contractions of grade 2 (weak) and below are usually referred to a physiotherapist for PF electrical stimulation. Ms Sims’ PF contraction was a borderline case, so she was given the choice of performing PF exercises herself or being referred to a physiotherapist.

She chose to try the exercises by herself, so was given a full explanation of how the pelvic floor works and an individualised regime of exercises. Her motivation to do PF exercises was that she wanted to start socialising again. She was also informed about various other options to help with PF strengthening. After a full explanation, she was given leaflets on weighted cones, biofeedback devices and surgical interventions.

Dietary advice Ms Sims was advised to lose weight as being overweight can increase the intrinsic pressure on her bladder, which can cause leaking of urine on minimal exertion. Also, her weight may have been affecting her mobility. Although she did not have constipation, the importance of bowel management and its effect on the bladder and pelvic floor were also discussed.

Medication review Anticholinergic drugs – for example, oxybutynin, which is used to treat urge urinary incontinence – should be used with caution for patients with reflux indigestion (British Medical Association and Royal Pharmaceutical Society of Great Britain, 2003). Initially these drugs were not included in Ms Sims’ treatment plan. However, it is possible to prescribe an anticholinergic drug to someone with reflux indigestion as long as the patient is aware of possible side-effects and the medication is reviewed regularly.

Ms Sims’ GP was asked to review the prescription for doxazosin and prescribe a course of oestrogen cream for her atrophic vaginitis.

Evaluation Performing an initial assessment is just the start of the management of continence problems. Evaluation of the treatment plan can provide patient contact, support and a chance to motivate the patient (Wilkinson, 1997). Ms Sims was reviewed after three months and her treatment was modified to include an anticholinergic drug – used with caution – to treat her urge urinary incontinence.

Her next review showed a reduction in daytime frequency. After a further three months she reported normal daytime voiding with nocturia once at night. Symptoms associated with stress urinary incontinence were also reduced but were not cured. She is now trying to maintain her bladder habit without the use of anticholinergic drugs.