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Bowel dysfunction can have detrimental effects on psychological, physical and social functioning. Two case studies show the impact of an anal irrigation system

Exploring the benefits of anal irrigation

In this article...

- The causes, prevalence and impact of bowel dysfunction
- Anal irrigation as a treatment option
- Two case studies showing positive patient outcomes

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Abstract Patterson A (2012) Exploring the benefits of anal irrigation. *Nursing Times;* 108: 18/19, 24-26.

This article discusses the prevalence, causes and impact of bowel dysfunction among adults, and suggests that anal irrigation may be considered as a viable alternative for selected patients who experience long-standing problems, where previous treatments have proved ineffective. Two case studies demonstrate the positive benefits of anal irrigation, and discuss some of the incidental findings such as fewer urinary tract infections.

Functional bowel disorders represent a broad range of problems associated with disordered defecation. These can include abdominal and rectal pain, abdominal bloating and discomfort, haemorrhoids, anal fissures and rectal bleeding (Ng et al, 2005), or faecal incontinence or evacuation difficulties (Ebanks and Mills, 2007).

This spectrum of symptoms of bowel dysfunction can be problematic for practitioners to manage and patients to live with (Duncan, 2004). Bowel management can be time-consuming and may interfere with patients' ability to work or socialise outside the home (Coggrave, 2007).

The prevalence of faecal incontinence reported in the literature varies due to differences in definition, but is thought to affect 1–10% of adults, with 0.5–1% experiencing regular incontinence that impacts significantly on quality of life (National Institute for Health and Clinical Excellence, 2007).

Although prevalence of the condition has been assumed to be higher in women, studies by Kalantar et al (2002) and Perry et al (2002) suggested it appears to affect both sexes equally, and may have been underreported in the past. The literature indicates three main groups may be predisposed to developing it: older adults; women with obstetric damage; and patients with neurological conditions such as multiple sclerosis (MS) and spinal cord injury (SCI).

Prevalence also appears to increase with age, with 25% of older residents in nursing home settings experiencing faecal incontinence (Rao, 2004). Risk factors for developing it are thought to be a history of urinary incontinence, neurological disease, severe cognitive impairment, poor mobility and age over 70 years (Kenefick, 2004). The development of faecal incontinence in older people may be indicative of poor and declining overall health and associated with higher mortality rates (Kenefick, 2004; Perry et al, 2002).

The commonest cause of the condition in younger women is reported to be obstetric damage (Zetterström et al, 1999; Sultan et al, 1993).

In patients with neurological conditions, such as SCI and MS, neurogenic bowel dysfunction is common with high prevalence rates reported (Chia et al, 1995). SCI has a significant impact on bowel function and these changes result in a high risk of faecal incontinence and constipation (Coggrave, 2007). For patients with a high SCI, bowel impaction can lead to autonomic dysreflexia, which can occur in anyone with SCI at or above the T6 level. It is related to disconnections between the body below the

5 key points

1. **Neurogenic bowel dysfunction is common in patients with neurological conditions such as spinal cord injury and multiple sclerosis**
2. **Bowel management can be time-consuming and may interfere with patients' quality of life and functional abilities**
3. **Faecal incontinence has detrimental effects on patients' psychological, physical and social functioning**
4. **For some patients, conservative treatment for faecal incontinence can prove ineffective**
5. **Anal irrigation should be considered for patients with long-standing ineffective bowel emptying, slow-transit constipation or neurogenic bowel dysfunction where all other conservative methods have failed or proved ineffective**

The lower part of the bowel can be emptied with anal irrigation

"Leaders must understand that caring is the essence of nursing"

Anne Boykin › *37*

CASE STUDY 1

Jenny Reeves* is 35 and married with two school-aged children. Mrs Reeves was diagnosed with secondary progressive multiple sclerosis eight years ago, and is now confined to a wheelchair when outside the home; her husband is her main carer.

She was initially referred to the continence service four years ago when she presented with urinary urgency and frequency secondary to incomplete bladder emptying. She was taught clean intermittent self catheterisation (CISC), which she had to perform four times daily, and started anticholinergic therapy. She was discharged when all urinary symptoms settled, and was competent in performing CISC.

Mrs Reeves was referred back to the service with increasing urinary urgency and frequency and recurrent urinary tract infections (UTIs). Her CISC technique was satisfactory, her fluid intake was good, and her GP had increased anticholinergic therapy to maximal levels without any improvement in symptoms. Mrs Reeves herself had increased the frequency of CISC in an effort to control her symptoms, again without success.

After assessment, it became apparent that slow-transit constipation had become a significant factor, exacerbated by the use of anticholinergics. Mrs Reeves had tried oral laxatives prescribed by her GP, which unfortunately caused faecal urgency and faecal incontinence; small-volume enemas also gave unsatisfactory results. The unpredictability of these results made her reluctant to use oral or rectal preparations, which often resulted in faecal impaction. To Mrs Reeves, the discomfort and associated side-effects of faecal impaction were preferable to the uncertainty of her bowel habit.

Anal irrigation was suggested to this patient and her husband as a method of bowel management, and supporting literature and DVD were given to supplement information, allowing them time to consider their options and discuss with their GP.

Mrs Reeves was keen to proceed, and both she and her husband were motivated. After a three-week initial clearance period, she was able to reduce use of the system from daily to alternate days, was experiencing satisfactory and immediate bowel clearance, and had had no episodes of faecal incontinence since starting anal irrigation. Since her faecal impaction has been resolved, her urinary symptoms have settled and she has returned to the previous CISC regimen. Mrs Reeves also reports improved appetite, and says she has lost weight. She has also noticed a significant reduction in UTIs, which may be attributable to resolving the faecal impaction, allowing more effective bladder emptying. Mrs Reeves is delighted with her outcomes, and continues to use the system one year later.

*The patient's name has been changed.

injury and the control mechanisms for blood pressure and heart function, and causes blood pressure to rise to potentially dangerous levels. Autonomic dysreflexia can be caused by anything that would normally cause pain or discomfort below the level of the injury. The most common causes are a full bladder, urinary tract infection (UTI) or severe constipation (Spinal Injury Network, undated).

It is thought that up to 30% of patients with MS develop regular faecal incontinence (Rao et al, 2004). It is therefore imperative that bowel care is proactive with the aim of achieving regular, predictable emptying, at a socially acceptable time and place, avoiding constipation and unplanned evacuations (Coggrave, 2007).

Bowel dysfunction has detrimental effects on patients' psychological, physical and social functioning, including embarrassment, social isolation, stopping sexual activity and a sense of loss of control (Bharucha et al, 2006; Goode et al, 2005; Norton, 2004). The frequency of faecal incontinence does not seem to relate to the severity of its psychological effects, as patients who have only experienced one episode often live in fear of recurrence (Chelvanayagam and Wilson, 2004).

Treatment

There are many treatments for bowel dysfunction, including pharmaceutical preparations to bulk the stool, reduce gut motility, relieve constipation or improve stool consistency (Bell and Wieser, 2004). Other forms of conservative treatment include dietary modification, electro-stimulation and biofeedback. However, some authors contend that biofeedback is not effective for patients with severe faecal incontinence, pudendal neuropathy or neurogenic conditions (Rao, 2004; Van Tets et al, 1996), while others argue that the interaction and counselling relationship between the health professional and patient is more important than technical aspects of treatment (Norton et al, 2002).

QUICK FACT

30%

Of people with multiple sclerosis develop regular faecal incontinence

In my clinical experience, for some patients, conservative treatments can prove ineffective and time-consuming, give unpredictable results and exacerbate faecal incontinence, especially where mobility is reduced. In the case of manual evacuation or digital stimulation, patients or carers may be reluctant or unwilling to conduct these procedures. The only options for these patients can be surgical intervention to create a stoma for example, or sacral nerve stimulation, which is expensive.

Anal irrigation

There is a need for a form of conservative bowel management that is acceptable, gives predictable results, promotes independence where possible and acts in a timely fashion.

When other conservative treatments have proven unsuccessful, and where there are no identifiable contraindications for use, anal irrigation should be considered for patients with long-standing ineffective bowel emptying, slow-transit constipation or neurogenic bowel dysfunction.

The benefits to patients include:

- Fewer episodes of faecal incontinence (Christensen et al, 2009a);
- Improved quality of life (Del Popolo et al, 2008);
- Reduced time spent on bowel management compared with previous methods (Christensen et al, 2009a; Del Popolo et al, 2008);
- Acceptable and well tolerated by patients, and it has a good safety profile both in the short and long term (Christensen et al, 2009b; Faaborg et al, 2009).

Peristeen has been widely reported as an effective, safe and cost-effective anal irrigation system for patients with neurogenic bowel dysfunction, faecal incontinence and slow-transit constipation (Christensen et al, 2009a; 2009b; Faaborg et al, 2009; Lopez et al, 2009). However,

Alamy, Fotolia

CASE STUDY 2

Neville Jones* is a 58-year-old teacher, who works full-time with children and young adults with learning disabilities. He was diagnosed with multiple sclerosis at the age of 40. Although he uses a wheelchair, he is fiercely independent.

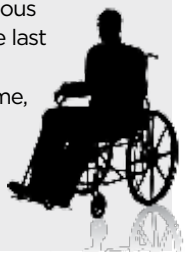
Mr Jones was referred to the continence service with recurrent catheter-acquired urinary tract infections and regular spontaneous expulsion of his self-retaining catheter.

He has a long-standing history of constipation, and had tried many regimens, including unsuccessful use of oral stimulants, which caused faecal incontinence. Mr Jones was using a combination of digital stimulation, manual evacuation and abdominal massage. This regimen took 90 minutes every morning, which was unacceptable to him.

He was offered anal irrigation as an alternative bowel management, and after discussing it with his wife and GP, he decided to proceed. Following the initial clearance regimen, Mr Jones chooses to use it on alternate days. He finds this system an efficient method of bowel clearance, which now established has reduced the time spent on bowel management from 90 minutes a day to 30 minutes on alternate days.

Despite having a self-retaining catheter in situ, Mr Jones reports a significant reduction in the number of catheter-acquired UTIs, which is a surprising but welcome incidental finding; and no spontaneous catheter expulsions in the last 18 months. Mr Jones is delighted with his outcome, and continues to use the product.

*The patient's name has been changed.



there is a small risk of bowel perforation at one per 50,000 irrigations (Christensen et al, 2009b; Faaborg et al, 2009); fewer than 1 in 100,000 uses (Medicines and Healthcare products Regulatory Agency, 2011), and it is prudent to counsel patients about this risk (Emmanuel, 2010).

This system is a way of emptying the lower part of the bowel by slowly introducing warm tap water into the rectum using a catheter held in place with a balloon, similar to a self-retaining catheter. The water is introduced into the bowel via the rectal catheter, by a hand-held pump, so patients or carers can control the amount and speed of water entering the bowel. The water is subsequently evacuated together with the contents of the rectum, sigmoid and possibly the descending colon (Emmanuel, 2010) when the balloon is deflated and removed.

The two case studies show that the anal irrigation system gave successful patient outcomes and some beneficial yet unexpected results.

Conclusion

Achieving a successful outcome with anal irrigation involves selecting appropriate patients, and requires motivation from both patients and health professionals to work through any initial problems.

Neither of the patients featured in this article were referred to the continence service with bowel symptoms as the primary reason; the case studies have shown some unexpected incidental findings, including reduced UTIs.

These case studies demonstrate the importance of a comprehensive, individualised continence assessment, as well as the fact that bowel dysfunction can cause a spectrum of symptoms, both urinary and faecal. **NT**

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