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Treating chronic constipation and faecal incontinence using transanal irrigation

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Transanal irrigation, also known as anal or rectal irrigation, has been used for some years in the treatment of both chronic constipation and faecal incontinence. The procedure involves insertion of a volume of water into the rectum and sigmoid colon, which flushes out the contents of the rectum and descending colon as far as the splenic flexure. This can provide predictable bowel emptying for many people for up to 24-48 hours, especially for those with neurological conditions, and can transform an individual's quality of life. Both constipation and faecal incontinence are symptoms and not diagnoses in their own right. Chronic constipation can affect up to 27% of the population, depending on the definitions used (Sanchez and Bercik, 2011), with increased prevalence among those with neurological disorders, and those with functional gastrointestinal disorders. Faecal incontinence is thought to affect up to 10% of the population (National Institute for Health and Care Excellence (NICE), 2007) and is often a hidden problem as patients are reluctant to discuss their symptoms.

Both constipation and faecal incontinence are known to be associated with poorer quality of life and can impact on family, work and social life. People with faecal incontinence can fear having a bowel accident in public and this can result in them becoming socially isolated. Transanal irrigation has been shown to improve both bowel dysfunction and quality of life if patients continue with treatment (Juul and Christensen, 2017). One person with multiple sclerosis has documented her search for an effective bowel management solution and the transformation that transanal irrigation made to her life (Lloyd, 2014).

Most studies of the effectiveness of this intervention have been conducted in people with neurogenic bowel dysfunction following spinal cord injury (SCI) and/or multiple sclerosis, but many clinical questions remain.

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National guidelines

There are national neurogenic bowel guidelines that highlight the importance of transanal irrigation in the armoury of interventions available for the management of neurogenic bowel dysfunction (Multidisciplinary Association of Spinal Cord Injury Professionals (MASCIP), 2012). These guidelines seem to suggest a stepwise approach to bowel management beginning with conservative and least invasive options, leading ultimately to surgery and stoma formation. The guidelines may indeed be interpreted in this way, suggesting that transanal irrigation should be introduced into an individual's bowel management programme after a trial of laxatives and before surgical interventions, such as sacral nerve stimulation. However, anecdotal evidence and experience from practice suggests that there are some people who will not respond to laxatives and for whom transanal irrigation should be introduced earlier. Equally there are some who will be non-responders and for whom transanal irrigation will not provide any symptomatic relief.

Transanal irrigation is a relatively safe procedure with few adverse effects reported (Emmanuel, 2010), although it is not entirely without risk. Some patients may experience some minor abdominal or rectal discomfort or slight rectal bleeding, but serious adverse effects, such as rectal perforation, are rare (Emmanuel, 2010). To reduce the risk of complications, transanal irrigation is contraindicated in some conditions including active inflammatory bowel disease (IBD), rectal or colonic mass causing obstruction, rectal/colonic anastomosis within the previous 6 months (Wilson, 2017).

Patient assessment

Nurses are ideally placed to assess whether transanal irrigation would be appropriate for an individual and several factors need to be considered. Ideally this intervention is self-administered so both manual dexterity and cognitive ability to perform this are necessary. However, many people with neurological conditions, for example those with a spinal cord injury at a higher level, may not be able to operate the equipment on their own. If an individual is unable to perform the procedure themselves, it may still be an option if they have a carer who is willing and able to undertake this for them. When considering whether carers should be used, the nurse has to consider whether it is appropriate for the family member or paid carer to take on this role. Family members may be willing to perform this intimate care for a loved one, but the potential impact on relationships should be borne in mind. Paid carers may be a more appropriate option, but clinical governance issues, such as indemnity and accountability, may be a barrier. Family members may often end up providing this care by default as this is preferable to waiting for bowel care to be given at a time that suits paid carers who may have limited time, rather than timed around the needs of the patient.

Different devices

There are a variety of devices that have been developed for people to use to carry out the procedure including Peristeen (Coloplast), Qufora (MacGregor Healthcare), Irypump (BBraun) and Navina Smart (Wellspect HealthCare). While the principle on which these systems are based is the same, the application of the water varies between pump and gravity-fed systems. Some devices use a self-retaining rectal catheter (e.g. Peristeen), while others administer the water via a cone inserted through the anus (e.g Qufora). Some systems require the individual to have sufficient manual dexterity to pump water through into the rectum manually, while others use an electric system to pump the water in (e.g. Irypump). Most systems require the individual to be able to sit on a toilet to empty their bowel, but the Qufora system, for example, may be used to administer transanal irrigation to an individual in bed. The latest devices (e.g. Navina Smart) are designed to be used with an app that can be downloaded onto a smart phone to track progress and it remains to be seen whether this will be preferred and widely accepted by patients.

At present there is no evidence to suggest that one system is more effective or preferable to another, so choice of system often comes down to the preference of both patients and specialist nurses, along with availability of funding and local formularies. It may be that the choice of device can influence whether an individual is willing and able to self-administer transanal irrigation, for example they may have agreed to undertake the procedure in hospital, only to refuse or struggle on their own at home.

There is recent evidence to suggest that up to one third of patients discontinue this treatment (Juul and Christensen, 2017), meaning that the funding used to purchase systems for these patients could have been used more effectively. It would be helpful to be able to identify the barriers and enablers to people being able to undertake transanal irrigation and qualitative exploratory research to understand the experience of using these systems is required. One study suggested that the only factor predictive of continuation with the treatment is whether this is effective or not (Bildstein et al, 2017), but other factors such as pain, difficulties with the technique or equipment failure can have an impact on an individual's confidence in using the intervention.

Many clinical questions remain unanswered, some of which are under investigation as part of a large series of ongoing clinical trials (CapaCiTY (https://tinyurl.com/y9q85ahs)), funded by a programme grant from the National Institute of Health Research. We do not know, for example, how much water is required to be inserted for maximum effectiveness and it would be helpful to understand this further so that nurses can introduce patients to the technique based on the best available evidence. Developing further research to explore other aspects of the procedure and effectiveness for specific groups of patients is needed, including studies to understand when it would be appropriate to introduce transanal irrigation within a bowel management programme. Nurses are ideally placed to develop such research and add to the evidence base.

Conclusion

In summary, transanal irrigation is an effective intervention for the management of chronic constipation and faecal incontinence, particularly for people with neurogenic bowel dysfunction. Nurses need to be able to introduce this to patients at an appropriate point in their bowel management programme, but it is unclear at what point this should be. It is also unclear who will respond best to this treatment, but it is important that it is made available and offered. What is needed is further research to answer some key clinical questions so that advice given can be based on the best available evidence. **BJN**

Bildstein C, Melchior C, Gourcerol G, Boueyre E, Bridoux V, Vérin E et al. Predictive factors for compliance with transanal irrigation for the treatment of defecation disorders. World J Gastroenterol. 2017; 23(11):2029–2036. https://doi.org/10.3748/wjg.v23.i11.2029

Emmanuel A. Review of the efficacy and safety of transanal irrigation for neurogenic bowel dysfunction. Spinal Cord. 2010; 48(9):664–673. https://doi.org/10.1038/sc.2010.5

Juul T, Christensen P. Prospective evaluation of transanal irrigation for fecal incontinence and constipation. Tech Coloproctol. 2017; 21(5):363–371. https://doi.org/10.1007/s10151-017-1635-7

Lloyd K. How transanal irrigation changed my life. Gastrointestinal Nursing. 2014; 12(Sup2):S4–S6. https://doi.org/10.12968/gasn.2014.12.sup2.s4

Multidisciplinary Association for Spinal Cord Injury Professionals. Guidelines for management of neurogenic bowel dysfunction in individuals with central neurological conditions. 2012 [under review]. https://tinyurl.com/y8kr45mh (accessed 4 December 2017)

National Institute for Health and Care Exellence. Faecal incontinence in adults: management. 2007. https://tinyurl.com/zyvoey4 (accessed 4 December 2017)

Sanchez MIP, Bercik P. Epidemiology and burden of chronic constipation. Can J Gastroenterol. 2011; 25 Suppl B:11B–15B

Wilson M. A review of transanal irrigation in adults. Br J Nurs. 2017; 26(15):846–856. https://doi.org/10.12968/bjon.2017.26.15.846