

Summary of Management of Neurogenic Bowel Dysfunction in Adults after Spinal Cord Injury: Clinical Practice Guidelines for Healthcare Providers, 2020

Paralyzed Veterans of America – Consortium for Spinal Cord Medicine

Summary

Transanal irrigation (TAI) is recommended in the Clinical Practice Guidelines for Spinal Cord Injury.¹ Specifically, TAI is recommended for individuals with neurogenic bowel dysfunction (NBD) who have insufficient results with basic bowel management (BBM). This overview summarizes details regarding the guidelines.

Epidemiology and clinical course

Bowel management is a challenge for Spinal Cord Injury patients:

- It is estimated that around 80% of individuals with spinal cord injury (SCI) have some degree of bowel dysfunction.
- Commonly reported symptoms include constipation (reported by 32% to 56%), fecal incontinence (27% to 86%), need for digital stimulation or evacuation of the rectum (66%), abdominal distension or discomfort (22% to 33%), and hemorrhoids (31% to 36%).
- The severity of bowel dysfunction is associated with depression and reduced quality of life (QOL).

Basic Bowel Management

Diet, fluids, and activity are used to modulate stool consistency. There are two methods of rectal stimulation, chemical and mechanical, which can be used individually or in combination. In addition, a number of oral medications are used to promote bowel function such as bulk-forming agents or laxatives. Large volume enemas are infrequently used and are not part of conservative bowel management due to the limitation for independent self-administration, ability of alternative effective first line treatments, and the potential to cause autonomic dysreflexia.²

Transanal irrigation (TAI) is recommended in individuals with NBD who have insufficient results with BBM

Support for effective bowel movement is important for the SCI population as the recommended frequency of bowel movements ranges from once per day to a minimum of three times per week.¹ TAI is a procedure in which irrigation fluid is pumped from a reservoir into the colon via a rectal catheter that has been inserted into the anus. Balloon catheters should be inflated with care to avoid triggering reflex contractions or autonomic dysreflexia (AD). Experts recommend TAI for individuals for which conservative methods are unsuccessful. In addition, TAI improves bowel management for individuals with full or restricted hand function, potentially decreasing reliance on the patient's caregiver.

Clinical evidence supporting the use of TAI

As reported, clinical evidence supports the success of TAI in treating constipation (40% to 63% of cases), fecal incontinence (47% to 72.7% of cases), and prolonged defecation time.^{3,4,5} TAI additionally improves symptom-related quality of life (QOL).^{2,4,6,7} Further, in an observational study, TAI was found to reduce or eliminate pharmaceutical use in 28.6% of subjects.⁴

Although TAI is considered a second-line treatment for conservative bowel management, it outperformed or matched conservative treatment in all parameters in a comparative randomized controlled trial.⁸ The overall average risk of Peristeen™ system is estimated at 6 per million procedures, as reported in a global audit of TAI (Peristeen)-related bowel perforation, with the majority (83%) of perforations resulting in emergency surgery.⁹

Strength of Clinical Evidence

Level: I	Evidence based on randomized controlled clinical trials (or meta-analysis of such trials) of adequate size to ensure a low risk of incorporating false-positive or false-negative results.
Strength: A	The guideline recommendation is supported by one or more Level I studies.
Agreement: Strong	Mean agreement score among the panel is between 3.87 to 5.0.

1. Clinical Practice Guidelines: Neurogenic Bowel Management in Adults with Spinal Cord Injury. Paralyzed Veterans of America (PVA) Spinal Cord Medicine Consortium. 2020.
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 3. Christensen P, Kvitzau B, Krogh K, Buntzen S, Laurberg S. Neurogenic colorectal dysfunction: use of new antegrade and retrograde wash-out methods. Spinal Cord. 2000;38(4):255-261.
 4. Faaborg PM, Christensen P, Kvitzau B, Buntzen S, Laurberg S, Krogh K. Long-term outcome and safety of transanal colonic irrigation for neurogenic bowel dysfunction. Spinal Cord. 2009;47(7):545-549.
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 6. Christensen P, Bazzocchi G, Coggrave M, et al. Outcome of transanal irrigation for bowel dysfunction in patients with spinal cord injury. J Spinal Cord Med. 2008;31(5):560-567.
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 8. Christensen P, Bazzocchi G, Coggrave M, et al. A randomized, controlled trial of transanal irrigation versus conservative bowel management in spinal cord-injured patients. Gastroenterology. 2006;131(3):738-747.
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