

A Randomized, Controlled Trial of Transanal Irrigation Versus Conservative Bowel Management in Spinal Cord–Injured Patients

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Introduction

Bowel dysfunction in patients with spinal cord injury often causes constipation, fecal incontinence, or a combination of both with a documented impact on quality of life. The aim of the study was to compare transanal irrigation (TAI) (**Peristeen**[®], **Coloplast**) with conservative bowel management (best supportive bowel care without irrigation).

Methodology

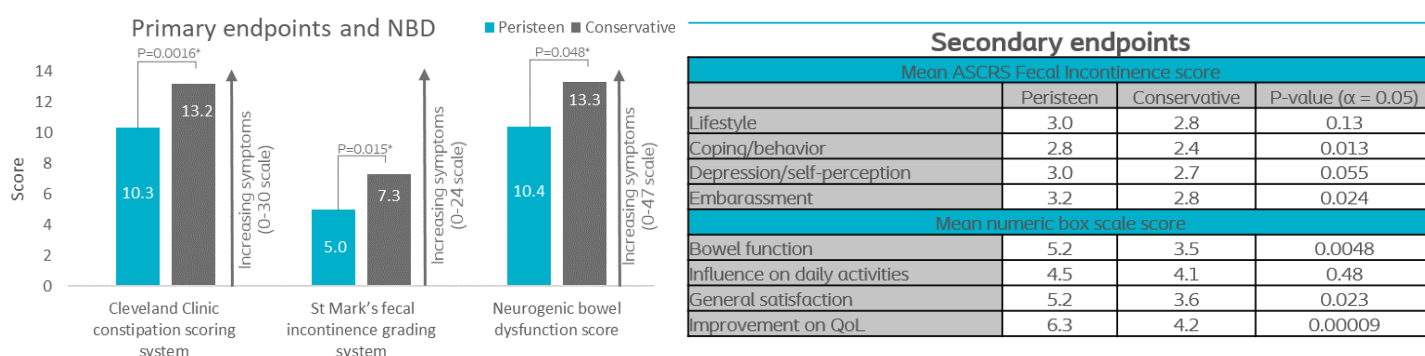
In a prospective, randomized, controlled, multicenter trial¹ involving 5 specialized European spinal cord injury centers, 87 patients with spinal cord injury with neurogenic bowel dysfunction (NBD) were randomly assigned to either TAI (**Peristeen**, **Coloplast**) (42 patients) or conservative bowel management (45 patients) for a 10-week trial period.

The **primary endpoints** of the study were scores on the Cleveland Clinic constipation scoring system and St Mark's fecal incontinence grading system.

Secondary endpoints included the NBD score and a modification of the American Society of Colon and Rectal Surgeons (ASCRS) fecal incontinence score a symptom-related quality-of-life score from which 4 subscales can be extracted: lifestyle [range, 1–4, with 4 representing high quality of life], coping behaviour, depression/self-perception [range, 1–5, with 5 representing high quality of life], and embarrassment. The remaining **secondary endpoints** were assessed on numeric box scales: bowel function (range, 0–10, 10 = perfect function), influence on daily activities (range, 0–10, 10 = no influence), and general satisfaction (range, 0–10, 10 = perfect satisfaction). At termination, the influence of the current bowel management on quality of life (QoL) was assessed on a numeric box scale (range, 0–10, 0 = great reduction and 10 = great improvement).

Results

Comparing TAI with conservative bowel management at termination of the study, the mean (SD) scores were as follows: Cleveland Clinic constipation scoring system (range, 0–30, 30 = severe symptoms) was 10.3 (4.4) versus 13.2 (3.4) ($P = .0016$), St. Mark's fecal incontinence grading system (range, 0–24, 24 = severe symptoms) was 5.0 (4.6) versus 7.3 (4.0) ($P = .015$), and the Neurogenic Bowel Dysfunction Score (range, 0–47, 47 = severe symptoms) was 10.4 (6.8) versus 13.3 (6.4) ($P = .048$) (**Figure 1**). The remaining secondary endpoints showed a significant benefit of TAI in 5 out of 8 endpoints (**Table 1**). Urinary tract infections (UTIs) treated with antibiotics were also reduced in the TAI group (5.9 % versus 15.5%) ($P = .0052$).



Conclusion

Compared with conservative bowel management TAI (**Peristeen**, **Coloplast**) significantly reduced constipation and fecal incontinence scores, improved symptom-related quality of life, and reduced the number of UTIs.

1. Christensen, P. et al. A Randomized, Controlled Trial of Transanal Irrigation Versus Conservative Bowel Management in Spinal Cord-Injured Patients. *Gastroenterology* (2006). doi:10.1053/j.gastro.2006.06.004