Clinical Evidence of Peristeen[®] for the Treatment of Neurogenic Bowel Dysfunction in Multiple Sclerosis

Introduction

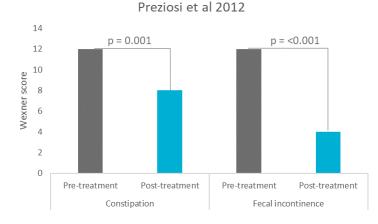
Multiple sclerosis (MS) is an immune-mediated inflammatory and progressive central neurologic disease, affecting both brain and spinal cord, but also causing bowel disturbance (most often chronic constipation (CC) and fecal incontinence (FI)), known as neurogenic bowel dysfunction (NBD) in over two-thirds of patients¹.

Management of NBD in MS patients is empirical and published outcomes with conservative therapy remain variable. Two clinical studies have investigated outcome, safety and predictive factors of success with transanal irrigation (TAI) with Peristeen in a population of MS patients.

Clinical studies overview

Study name	Preziosi et al 2012 ²	Passananti et al 2016 ³
Study design	Prospective observational	Prospective observational
Intervention	Peristeen TAI	Peristeen TAI
Pathology	MS	MS
Study size	30 adults	49 adults
Timeline	6 weeks	4 years (minimum follow-up of 1 year)
Primary endpoints	Wexner-Constipation score (0-30, with 30 being most severe) and Wexner-Incontinence score (0-20, with 20 being most severe)	NBD score (0-47, with 47 being most severe) and EQ-5D (quality of life assessment)
Methods	Patients were asked to fill out questionnaire at baseline and 6 weeks posttreatment. Patients with >50% improvement in bowel scores were considered responders.	Predominant symptoms, reason for beginning TAI and medical comorbidity were investigated. All patients underwent anorectal physiology testing. They completed NBD and EQ-5D questionnaires at baseline and annual follow-up.
Conclusion	TAI is effective to treat bowel symptoms in patients with multiple sclerosis.	TAI is an effective long-term treatment for MS patients with NBD. It also reduces the use of other healthcare services, such as hospitalizations and visits to the general practitioner.

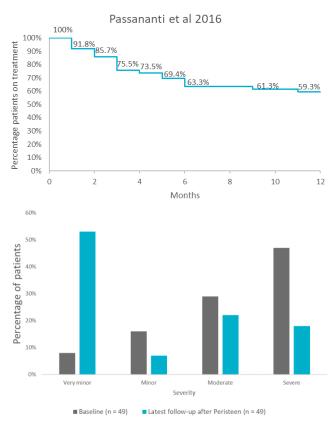
Results



Top left: Comparison between pre- and post-treatment of Wexner-Constipation and Incontinence scores. Significant reduction in both scores after 6 weeks treatment with Peristeen was observed.

Top right: Kaplan-Meier plot showing patient discontinuation of Peristeen therapy over 1 year. Majority of discontinuations (36.7 %) happened within first 6 months.

Bottom left: NBD score at baseline and at latest follow-up after starting Peristeen. There is a significant shift towards less severe NBD at the follow-up after Peristeen treatment.



Conclusion

Both studies observe an improvement in bowel symptoms both short-term and long-term, demonstrating that TAI is an effective treatment for MS patients with NBD.

1. Chia, Y. W. et al. Prevalence of bowel dysfunction in patients with multiple sclerosis and bladder dysfunction. J. Neurol. 242, 105–108 (1995).

2. Preziosi, G. et al. Transanal Irrigation for Bowel Symptoms in Patients with Multiple Sclerosis. Dis. Colon Rectum 55, 1–8 (2012).

3. Passananti, V., Wilton, A., Preziosi, G., Storrie, J. B. & Emmanuel, A. Long-term efficacy and safety of transanal irrigation in multiple sclerosis. Neurogastroenterol. Motil. (2016). doi:10.1111/nmo.12833

