Patients with multiple sclerosis (MS) often experience severe debilitating lower urinary and bowel dysfunction in addition to the physical disabilities. The aim of this study was to determine the ability of Peristeen® transanal irrigation system to reduce symptoms of neurogenic bowel dysfunction (NBD) and the effects on patient quality of life (QoL), lower urinary tract and sexual function.

From January 2016 to January 2017, consecutive patients with diagnosis of neurogenic bowel dysfunction secondary to MS who were unsuccessful with their current bowel regimen were recruited from our neurological department. This was a prospective clinical trial of 6-month period: the first phase of 3 months was a roll-in time to determine whether patients respected inclusion criteria, to appreciate their bowel habits and to verify how many urinary tract infections (UTIs) were present during this period.

The second phase of 3 months was the operative trial with the use of transanal irrigation. Luts were evaluated with the International Prostate Symptoms Score (I-PSS), neurological impairment was assessed using the Expanded Disability Status Scale (EDSS), bowel dysfunction was investigated with the Neurogenic Bowel Dysfunction score (NBDs) and sexual dysfunction was recorded with the International Index of Erectile Function (IIEF-15) and Female Sexual Function Index (FSFI).

Regarding UTI, data collected evidenced a general decrease during the study, particularly, of Escherichia coli infections: 24 UTI in 3 months before treatment (9 E. coli) versus 6 (3 E. coli) during trial (P<0.01). There was an increase in patients’ opinion of their intestinal functionality (P<0.001), their QoL score (P<0.001) and their answers regarding the degree of satisfaction (P<0.001).

About modality for evacuation, we observed a significant reduction in manual extraction (25 patients before versus 4 after the trial; P<0.01), in suppositories or enema (18 patients before versus 5 after the trial; P<0.01) and in the use of oral laxatives (17 patients before versus 5 after the trial; P<0.01). Patients with an EDSS score < 4 showed an higher improvement of bowel habit.

Our results suggest that transanal irrigation is a valid treatment, it improves bowel disturbances, quality of life and seems to reduce the risk of urinary tract infections.