

NEUROMODULATION AND DIARRHEA: IS THERE A BENEFIT ?

Hypothesis / aims of study

Sacral neuromodulation (SNM) is effective in treatment of fecal incontinence. However, its mode of action is as yet unknown. Diarrhea is a common etiology of fecal incontinence (FI) and in some patients may be difficult to control medically. The aim of this study was to evaluate if patients who have FI and concomitant diarrhea have any benefit from sacral neuromodulation with respect to change in the bowel frequency.

Study design, materials and methods

Patients undergoing SNM for FI between March 2012 and October 1, 2012 with a concomitant diagnosis of medically refractory diarrhea were evaluated. The endpoint was a decrease in bowel movements. The Patient Global Impression of Change Scale (PGIC) was used to describe changes in activity, limitations, symptoms, and quality of life related to the procedures (scored from 1-7; 1 = no change to 7 = considerable improvement).

Results

Five female patients met the criteria and underwent SNM stage 1 and 2. The average age was 41 years. All patients were female. The etiology of FI was idiopathic (n=3), Irritable bowel with gastric bypass (n=1), total abdominal colectomy (n=1). The total number of preoperative bowel movements ranged from 6-25 bowel movements per day. After SNS implantation all patients reported a reduction in the number of daily bowel movement to 2-4 per day. Preoperative FISI scores ranged between 20-61. Fecal accidents decreased from multiple daily episodes to 1-2 times per week. The average PGIC score was high, reported at 6.6 at follow up.

Interpretation of results

The etiology of diarrhea was varied in this group of patients. All patients had severe fecal incontinence preoperatively. All patients improved symptomatically after device implantation. All patients reported high satisfaction scores post surgery.

Concluding message

In this series of 5 patients, SNM appeared to control the symptoms of diarrhea, leading to a decrease in symptoms of FI. Long-term evaluation is needed to determine if the results are sustained. Patients with diarrhea can be offered SNM to treat symptoms of FI. Future studies should be powered to evaluate the effectiveness of SNM based on the etiology of the diarrhea.

Disclosures

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