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## **CHANGE IN PELVIC PAIN RATINGS SIX MONTHS AFTER IMPLANTATION OF INTERSTIM FOR SACRAL NEUROMODULATION**

### **Aims of Study**

Chronic pelvic pain frequently co-exists with lower urinary tract symptoms amenable to treatment by sacral neuromodulation (SN). Our aim was to document the effects of SN on ratings of chronic pelvic pain associated with lower urinary tract symptoms.

### **Methods**

The Medtronic InterStim™ Registry currently involves 24 physicians who report on the outcomes of SN in their consenting patients. The records of Registry patients were reviewed and all those with a baseline pain rating of at least 2 on a scale of 0 (No Pain) to 10 (Worst Imaginable Pain) were included in this analysis. Baseline demographic information, past medical history, primary and secondary indications for SN, intraoperative findings and results 6 months after implantation were extracted. Logistic regression was used in an attempt to identify patients who reported at least a 50% reduction in their pelvic pain six months after implantation.

### **Results**

There are currently 159 patients in the registry with a baseline pelvic pain rating of at least two. Test stimulation was successful in 121 (76%) of these patients and 105 have undergone InterStim implantation. Currently, six-month follow-up data were available for 40 patients.

At baseline, the median pelvic pain ratings of these 40 patients was 5 (range 2-10, interquartile range 3-8). At six months, the median pain rating was 2 (range 0-10, interquartile range 1-3). The median change from baseline for the 40 patients was 2.5 (range 7 points worse to 10 points better) with 26 (65%) patients improving at least 50% from baseline. Just 2 (5%) patients reported a worsening of pain.

Multivariate stepwise logistic regression identified no significant predictors of an improvement >50% in pain rating, although linear regression analysis found that a baseline pain rating of >5 was a significant predictor of the numeric change in the pain scale at six months ( $p < 0.01$ ). Patients with a baseline pain rating >5 had a median change of 5.5 points, while those with baseline pain rating  $\leq 5$  had median change of 1 points.

### **Conclusions**

In this group of patients, sacral neuromodulation was associated with improved pelvic pain ratings 6 months after implantation. The durability of this improvement remains unknown. No useful baseline predictor of >50% pain relief was identified by this analysis. Our ability to learn from implanted patients will grow as the size of the registry increases.