## Sacral Neuromodulation Failures

Introduction and Objectives: Sacral neuromodulation (SNM) is a validated treatment option for refractory voiding dysfunction. It does not work for all patients, and/or there can be complications associated with it that require its removal. There are no studies examining the status of patients who have had a sacral neuromodulator removed. The goal of this study is to examine the current treatment(s) and quality of life of patients who have had a sacral neuromodulator removed. Reasons for device removal and attitudes towards SNM will also be described.

**Methods:** Patients treated by sacral neuromodulation in Halifax between the years of 1995-2008 by a single urologist were identified. There were 96 patients who had a sacral neuromodulator placed for refractory voiding dysfunction, and of these, 22 patients subsequently had the device removed. There were no exclusion criteria. Initial contact was made by mail. Reasons for device removal, current treatments, and attitudes toward SNM were assessed by chart review and questionnaire answers. Current quality of life was assessed by the ICIQ-LUTSqol questionnaire.

**Results:** A 45% participation rate (10 of 22) was achieved. Reasons for device removal were device pain (7), and lack or loss of effect (3). Subsequent treatments are ileocystoplasty (2), urinary diversion with cystectomy (3), oral anticholinergics (4), opioid analgesics (3) or none (2). Average score on the ICIQ-LUTSqol questionnaire was 53 out of 76 (range 22 to 65), with an average bother score of 6.7 out of 10 (range 0-10). When asked if they would consider SNM again, responses were "yes" (5), "maybe" (2), and "no" (3).

**Conclusion:** Sacral neuromodulation offers a less invasive option for patients with refractory voiding dysfunction. However, patients should be counseled about the possibility for device complications necessitating removal. Many of these patients are subsequently treated by more invasive surgical interventions, yet continue to have a poor quality of life. Many patients would consider trying SNM again.