

Long-Term Results of Sacral Neuromodulation for Voiding Problems in the Pediatric Population in a Single Center

Introduction and Objectives: Sacral neuromodulation is a useful therapy for many voiding problems. Although our group and others have reported on its use in children with good results, longer term follow-up has not been examined. We report on our extended experience with sacral neuromodulation for a variety of urinary disorders in the pediatric population at our center.

Materials and Methods: The charts of 22 patients under the age of 21 who received an Interstim implant from 2001 through 2011 were reviewed. Demographic data were gathered and the indications for implantation were noted. Patients were grouped according to whether each had successful reduction of his or her symptoms by 50% or had failed as of the time of last followup after implantation.

Results: The indications for were refractory frequency, urgency and/or urge incontinence. Patient age ranged from 6-19 with a mean of 12. There were 9 males and 13 females. Follow-up ranged from 1-89 months with a mean of 26 months. At last follow-up, there were 14 patients (64%) with ongoing relief of their presenting symptoms. This group included 3 patients who were doing well enough that they had requested removal of the device. There was no difference in the age or sex distribution between the successful group and the group that failed. The overall rate of complications requiring intervention was 36%.

Conclusion: Sacral neuromodulation in the pediatric population is a viable alternative for voiding problems refractory to medication and behavioral therapies. The complication rate is similar to that reported in adults. Some patients will fail with extended follow-up but there may be a small population that will have resolution of their symptoms and possibly require no further treatment. With further study, factors predictive for success may be identified that could allow improved patient selection in this group of patients for this procedure.