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INTERSTIM IMPLANTS IN THE PEDIATRIC POPULATION

Hypothesis / aims of study

Sacral neuromodulation has been used to treat frequency/urgency syndrome, refractory urge incontinence, and non-obstructive urinary retention for ten years. The results have been excellent both short-term and intermediate. The use in children has been less common, but it has been fairly efficacious in the few reports that have surfaced. We report on our experience with Interstim at a single center.

Study design, materials and methods

From January 2001 through January 2008, we implanted 19 children with the Interstim device. In all cases, it was implanted for refractory frequency/urgency and urge incontinence. The age range was 5-17 with a mean of 12.5 years. There were ten girls and nine boys. The diagnoses were as follows: spina bifida – 3, anorectal malformation – 1, cerebral palsy – 2, dysfunctional elimination syndrome – 13.

Results

All patients went on to full implant after the test stimulation was completed. There were two patients who had the device removed, one for lack of efficacy and one after three years, who had complete and lasting resolution of symptoms. Two patients had to have the device revised for battery malfunction. All but three patients are off all ancillary bladder medications and are satisfied. These three patients are 50% improved, but not satisfied with the results. There were no infections or lasting complications. The average follow-up is 3.2 years (3 months – 7 years).

Interpretation of results

Sacral neuromodulation appears safe in children and efficacy approaches that of the adults. Further study needs to be done in this population, as growth and other parameters may affect the implant necessitating further procedures.

Concluding message

Interstim implants are able to be performed in the pediatric population and the results are excellent. The long-term efficacy bears observation.

Specify source of funding or grant	**No funding**
Is this a clinical trial?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**No**
This study did not require eithics committee approval because	**Retrospective chart review**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**No**