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SACRAL NEUROMODULATION IN NEUROLOGICALLY IMPAIRED WOMEN WITH DETRUSOR AREFLEXIA

Hypothesis / aims of study

Recently sacral neuromodulation has been introduced into the neurologically impaired patient population with Cerebral Palsy and urgency. We describe our results in women with Multiple Sclerosis (MS), Transverse Myelitis (TM) or Diabetes (D) and Detrusor Areflexia

Study design, materials and methods

We retrospective reviewed a group of patient cohorts who between January 2002 and March 2008 we performed 24 Stage 1 Interstim and 17, Stage 2 Interstim implantations under a general anesthetic. Participants underwent complete history and physical examination, catheterization and voiding diaries, videourodynamics and cystoscopy. Patients managed their bladders with clean, intermittent catheterization (CIC) and had failed conservative therapies such as alpha-blockers and urecholine. All patients were diagnosed with an areflexic bladder with stable, well-controlled neurological disease, and were followed by a neurologist for at least 2 years. Success was defined as spontaneous voiding with post-void residuals less than 100 mls and having no need to perform CIC after one-year minimum follow-up.

Results

Seventeen of 24 patients (71 percent) [85 percent-12/14 MS, 71 percent -5/7 TM, 0 percent-0/3 Diabetes] were successfully implanted, with a mean follow-up of 4.05 ± 2.32 years and mean post-void residual of 61.5 ± 19.31 millilitres. The mean uroflow was 16.72 ± 6.61 mls/sec. Twenty-nine percent (5/17) required revisional surgeries for lead migration, and 41% needing battery replacement. There were no IPG (Implantable Pulse Generator) or lead erosions / infections

Interpretation of results

Detrusor areflexia in neurologically patients can be successfully and safely managed with sacral neuromodulation with few complications in the short- to medium-term (1 – 5 years) follow-up. Additional studies will be needed to clarify its role in Diabetic patients

Concluding message

Sacral neurmodulation for neurologically impaired patients with detrusor areflexia may be successful and requires further investigation.

Specify source of funding or grant	**None**
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	**No**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**