

A SHORT-TERM ANALYSIS OF PARAMETERS AFFECTING THE OUTCOME OF SACRAL NEUROMODULATION

Hypothesis / aims of study

Sacral neuromodulation has become an effective option for controlling intractable symptoms of overactive bladder; urgency and urge incontinence. However, it has its limitations in that intermittent pulse generator (IPG) is insertable only in patients with at least 50% of symptom improvement. In this study, we aimed to investigate the predictive parameters that affect surgical outcomes.

Study design, materials and methods

Data from 31 candidates for sacral neuromodulation was retrospectively analyzed. 20 patients out of 31 candidates had satisfactory symptom improvement after tinned lead test implantation, which resulted in IPG implantation. Data and neural stimulation parameters were compared and analyzed between successful IPG implants (group 1) and test failures (group 2).

Results

The percentage of female patients was higher in the IPG implant group (95% vs 64%). There was a significant difference in symptom duration, between the two groups (40.1 months for group 1, and 91 months for group 2). There was a significant difference in the number of episodes of urgency between the two groups (6.83/day vs 9.66/day, $p=0.012$), and severity of urgency showed significant difference between two groups ($p=0.027$).

Interpretation of results

In females, the severity and duration of symptoms are the factors predicting poor response to neuromodulation

Concluding message

In this study, severity and duration of symptoms are predicting poor outcomes deciding inserting neuromodulator. Although there is a need for further data analysis, this study suggests that the proper selection of surgical time is important in control patients' lower urinary tract symptoms (LUTS) by neuromodulation.

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	retrospective chart review
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes