

CLINICAL OUTCOMES OF SACRAL NERVE STIMULATION IN MEN WITH OR WITHOUT INTERSTITIAL CYSTITIS OR CHRONIC PELVIC PAIN SYNDROME

Hypothesis / aims of study

Sacral nerve stimulation (SNS) is approved for urinary urgency/frequency, urge urinary incontinence and non-obstructive idiopathic urinary retention. Many patients also have conditions such as interstitial cystitis (IC) or chronic pelvic pain syndrome (CPPS). The literature is lacking regarding results of this type of intervention in this particular population of men. Although IC/CPPS is not a primary indication for SNS, anecdotal reports suggest some patients have symptomatic improvements, but the majority of patients were female. We examined clinical outcomes of SNS in men using a validated instrument, and compared results in those with and without IC/CPPS.

Study design, materials and methods

A retrospective review of prospectively obtained data were collected in patients undergoing SNS by a single surgeon. Subjects completed the American Urological Association (AUA) Symptom Index at each pre- and post-operative visit. Patients were divided into two groups based on whether they also had an established diagnosis of IC/CPPS. Total AUA Symptom Score (AUA-SS), quality of life score (QoL) and individual question subscores were analyzed. Within group analyses were performed using paired t-tests while between group analyses used two-sample t-tests for means. Results were considered significant $p < 0.05$. Given 19 subjects, the power to detect a 1 point difference in AUA-SS or a 1 point difference in QoL score is 0.87.

Results

Nineteen men, mean age of 63, underwent SNS for clinically indicated symptoms and met inclusion criteria. Group 1 ($n = 6$) also had IC/CPPS, and Group 2 ($n = 13$) did not. Median followup was 55.5 months. Mean AUA-SS total was not statistically improved in Group 1 ($p = 0.05$) but it was in Group 2 ($p = 0.04$). Between group analysis revealed no difference in pre-op scores except in Group 1, who had worse frequency scores ($p = 0.03$). Breakdown of scores by within group analysis for each AUA-SS question revealed Group 1 only had statistically significant improvement in weak stream and QoL ($p < 0.01$ and 0.03 , respectively). Group 2 showed statistically significant improvement in incomplete emptying ($p = 0.04$), frequency ($p < 0.01$), urgency ($p = 0.02$), and QoL ($p = 0.02$).

Interpretation of results

To our knowledge, this is the only study to specifically compare voiding outcomes after SNS in men with or without IC/CPPS with a validated instrument. These data demonstrated men implanted with SNS who have concomitant IC/CPPS may not benefit as much as those without this additional diagnosis. These findings should prompt prospective studies into the efficacy of SNS implantation in men with significant IC/CPPS. In addition, these patients should be counselled regarding realistic goals that can be potentially achieved using SNS for voiding symptoms based on presence or absence of IC/CPPS.

Concluding message

Sacral nerve stimulation may be a viable clinical treatment option in men with urinary symptoms associated with IC/CPPS.

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?	Yes
Specify Name of Ethics Committee	University of Kansas Human Subjects Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes