

THE OUTCOME OF SACRAL NEUROMODULATION IN MEN WITH NON OBSTRUCTIVE URINARY RETENTION

Hypothesis / aims of study

Sacral Neuromodulation (SNM) is a technique used to modulate the spinal reflexes including those supplying the bladder. As a consequence it has become an established treatment for those with refractory detrusor overactivity. Furthermore, it is increasingly being used in patients with idiopathic non obstructive urinary retention. Before the advent of SNM, patients who had voiding difficulty with no clear obstruction had few options available to them aside from relying on a form of catheterisation of the bladder. However, SNM in some patients has resulted in either fewer mean number of catheterisation events; or not needing to catheterise at all. We reviewed our experience in a large tertiary referral centre of treating males with Non Obstructive Urinary Retention (NOUR) with SNM.

Study design, materials and methods

We review a prospective database of all men presenting with NOUR undergoing SNM implantation between May 2014 to October 2016. To confirm the diagnosis all patients underwent Video-urodynamic studies (VCMG); those with some detrusor function also had urethral pressure profile (UPP). Neurology was excluded with a clinical examination and cross sectional imaging. SNM is a two staged with the first stage being the test period. All patients underwent a trial of tined lead for a minimum of four weeks and a successful outcome was determined by 50% improvement on validated lifestyle questionnaires (ICIQ and EQ5D), Frequency Volume Charts and Subjective patient reported outcome evaluation. During the second stage those who had a good response during the test period went on to have permanent implantation of InterStim 2 implantable pulse generator

Interpretation of results

24 men with a mean age of 44 were diagnosed with NOUR. 14 had an acontractile detrusor muscle and 10 had high pressure, low flow voiding pattern consistent with high tone non relaxing sphincter. 8 patients had a successful trial and went on to have the permanent implant. 3 remaining patients have a successful working device that has improved their symptoms, both objectively and subjectively. The remainder had the device explanted or awaiting explantation.

Concluding message

SNM does not appear efficacious for the treatment of NOUR for the majority of male patients with only 12.5% success rate. A larger study would help better identify patients who could potentially benefit.

Disclosures

Funding: Not Applicable **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** The aim was to review patient care and outcomes **Helsinki not Req'd:** The patients were not involved in medical research, but rather underwent the standard treatment for their condition with subsequent outcomes reviewed. **Informed Consent:** Yes