

George, Anil Thomas, 2013 Abstract

Posterior Tibial Nerve Stimulation For Fecal Incontinence

Objective

The researchers investigated and analyzed a number of studies that compared the differences and benefits of posterior tibial nerve stimulation (PTNS) with sacral nerve stimulation (SNS) for the treatment of patients with fecal incontinence who fail to respond to available conservative measures.

Results

Neurostimulation remains the mainstay of treatment for patients with fecal incontinence who fail to respond to available conservative measures. SNS is the main form of neurostimulation that is in use presently. PTNS – both the percutaneous and transcutaneous routes – holds promise to be an effective, patient-friendly, safe, and inexpensive treatment.

In comparison to SNS where the treatment effects are short-lived following the withdrawal of treatment, PTNS appears to confer a slightly longer-lasting effect (albeit with a declining efficacy).

Researchers

The clinicians were Anil Thomas George, Colorectal Surgery, St Mark's Hospital, London, England, and Colorectal Surgery, Queen's Medical Centre University Hospital, Nottingham, England; Rudra Krishna Maitra and Charles Maxwell-Armstrong, both from Colorectal Surgery, Queen's Medical Centre University Hospital, Nottingham.

Methods

In the studies investigated by the research team, they found that the costs for transcutaneous PTNS remain considerably smaller than for SNS. The stimulator unit used in the variety of studies was the NeuroTrac Continence unit (Verity Medical), which can be reused as the percutaneous stimulator, with reusable adhesive surface electrode stimulation pads (Verity Medical).

There remains no question that SNS is less patient-friendly and more expensive than PTNS in the short term. Early attempts to make SNS more patient-friendly have experimented with less invasive forms of SNS administration using a PTNS-like stimulator unit, the NeuroTrac Continence (Verity Medical), which is minimally invasive and does not require any operative procedures or a hospital inpatient stay.

The researchers concluded that at the time of their studies, the direct medical costs for PTNS remain nearly ten times cheaper compared to those for SNS.

The full abstract can be found at <https://www.wjgnet.com/1007-9327/full/v19/i48/9139.htm>.