Spinal Cord Stimulation for Functional Anorectal Pain

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Introduction

When a clinical examination and subsequent investigations fail to identify any pathological process such as anal fissure, abscess, fistula or so on, the patients with anal or rectal pain are described as having functional anorectal pain. The Rome IV diagnostic criteria for functional bowel disorders classify functional anorectal pain into chronic proctalgia and proctalgia fugax. The management of patients with functional anorectal pain can be both challenging and frustrating. Recent=studies have indicated that Spinal Cord Stimulation can improve pain symptoms in patients with chronic pelvic pain.

Idiopathic Anorectal Pain

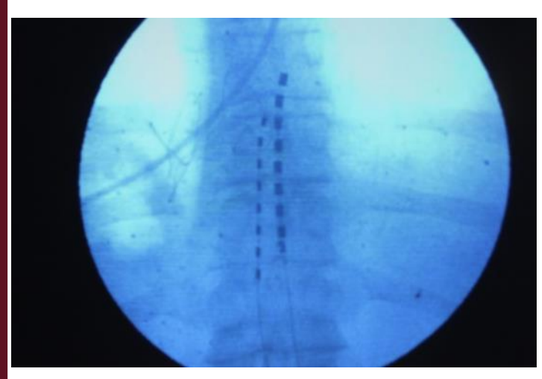
- Chronic or frequently recurring pain in the anal canal, rectum, or pelvis is a prevalent symptom that affects an estimated 6.6% of the population
- Chronic idiopathic anal pain is part of a group of rather ill-defined disorders called “Chronic Idiopathic Perineal Pain” which includes proctalgia fugax, perineal neuralgia and coccygodynia.
- The principal feature of these syndromes is that no abnormalities are found on clinical examinations.

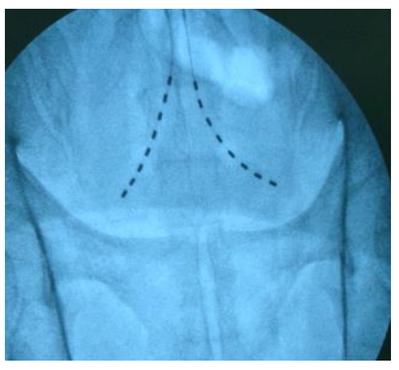
Study design

Patients with functional anorectal pain were enrolled in this study after informed consent was given. At baseline, all patients underwent anal manometry and the score obtained from the visual analogue scale (VAS) was recorded. Patients were asked to evaluate the level of pain on a visual analog scale of 0 to 10.

Procedure

First Stage: Patient is placed Jack-Knife position with local anesthesia. The guide needles are inserted into the epidural space from L3-4 or L4-5 and electrodes are placed level of Th12 to L2. On the other hand, for the patients who are difficult to insert upward, the electrodes are advanced inferior into S3 foremen and placed beside Sacral nerves. The procedure is performed bilateral.
The nerves were stimulated using the Spinal Cord Stimulating System (Medtronic. MA, USA). This included pairs of leads with 6 electrodes.





second stage: The generator is implanted in the pocket under skin and the wound is closed with absorbable sutures.

Results

25 patients underwent first stage. During test stimulation, one patient complains leg pain and had removal of electrodes. 24 patients underwent second stage. 4 patients had removal of electrodes and generator because of complication as recurrence of pain and infection. The mean VAS significantly decreased from 72 to 33 ($p < 0.01$). An improvement of >50% in VAS was seen in 34% of the patients.

Management Pathway for Anorectal pain (Our institution)

History, Digital examination, Anal scope, Endoanal Ultrasound, Sigmoidoscopy

→ Differential Diagnosis
IBD, Rectal cancer, Anal stenosis, Hemorrhoid, Anal fissure, Anal fistula, Rectal prolapse, etc

Manometry, Anorectal sensation, EMG, etc

First line

Medical Therapy, Biofeedback, Warm bath, Puborectalis muscle massage

Electrical stimulation

Posterial Tibial Nerve Stimulation, Trasanal Electrical Stimulation

Magnet stimulation

Neural block

Second line

Surgical Treatment

Spinal Cord Stimulation, Sacral Neuromodulation

Sphincterotomy

Conclusions

It is concluded that low-frequency stimulation therapy using a spinal cord stimulator is effective for functional anorectal pain.
SCS and SNM is second option for the patient who failed conservative therapies.

← This is our pathway for the management of functional anorectal pain.

Limitations: This study was limited by its small sample size and its lack of blinding and control.
Disclosers: no