

SACRAL NERVE STIMULATION: IS IT THE SOLUTION FOR SEVERE FAECAL INCONTINENCE?

Hypothesis / aims of study

The aim of this study is to show the results of a relatively new innovative service providing sacral nerve stimulation for patients with severe faecal incontinence.

Study design, materials and methods

Faecal incontinence (FI) is estimated to affect 2% of the adult population (1) and occurs more frequently in women. However it is suggested that this estimate is grossly underestimated as a result of under-reporting of the condition by patients because of embarrassment. FI can dramatically disrupt people's quality of life (QOL) with symptoms affecting them socially, sexually, psychologically and physically.

NICE guidelines for FI (2) suggests that people with FI should have a baseline assessment and initial management carried out by healthcare professionals who have relevant skills, training and experience in caring for these people. If initial treatment is unsuccessful patients suffering with FI should be referred on for specialist management which could include intensive pelvic floor exercises, bowel retraining, biofeedback and surgical procedures. One possible surgical procedure is sacral nerve stimulation (SNS) which has proven to be successful in previous studies.

The author has co-ordinated a sacral nerve stimulation service since the October 2007 for carefully selected patients with FI. The procedure is carried out by the colorectal surgeons in combination with Urogynaecologist's.

The procedure is carried out in two phases. Phase one is the insertion of a temporary SNS wire for a 2 week period. A bowel diary, which includes frequency and urgency of bowel movement, faecal incontinence episodes as well as QOL, is completed for 2 weeks previous to the procedure and another whilst the temporary SNS wire is in situ. After 2 weeks the wire is removed, the 2 diaries compared and if improvement is seen the patient will go on to phase 2, having a permanent SNS implant inserted. As well as completing the diaries patients also complete the St Marks incontinence score calculating a total score from 0 (continent) to 24 (complete incontinence).

Results

Between October 2007 and May 2010 22 patients, 20 females and 2 males, had a temporary SNS wire inserted, mean age 53 (range 30 – 79). Fourteen of these (all female) went on to have a permanent SNS implant with very encouraging results. Of these 14 patients the average St Mark's score was 17 (range 18-20) before insertion of the temporary SNS wire which reduced to an average of 5 (range 1-10) whilst temporary SNS wire was in situ. Subjectively these patients reported an average of 14 times controlled (range 2-30) and 28 times urgently (range 15- 79) opening their bowels and average incontinence episodes (urge and passive) of 14 (range 1-24) over the 14 days before temporary SNS wire was inserted. This reduced to an average of 15 times controlled (range 6-34) and 4 times urgent (range 1-12) opening their bowels and average incontinence episodes (urge and passive) 0 (range 0-3) over the 14 days that the wire was in situ.

Interpretation of results

The majority of patients undergoing this procedure were females. The conversion rate from a temporary SNS wire to a permanent SNS implant was 64% of this sample all of which were females. The urgency to open their bowels dramatically reduced by 86% enabling them to have control over their bowels, opening them on average once a day over the 14 day period that the temporary SNS wire was in situ. The majority of the patients became totally continent which was reflected in the St Marks Score reducing from an average of 17 before to 5 after.

Comments from patients

"It's given me my life back", "I can go out without fear of being incontinent", "This is the first time in 10 years that I have passed a formed stool with no urgency", "The only other option available to me was a stoma"

Concluding message

This study would suggest that sacral nerve stimulation is a viable option for patients who have severe faecal incontinence who have failed conservative treatment; it will not only improve their faecal incontinence but in turn will significantly improve their quality of life.

References

1. Perry, S. Shaw, C. and McGrother, C (2002) Prevalence of faecal incontinence in adults over 40 or more living in the community, GUT, 50, 480-4
2. National Institute of Clinical Excellence (2007) Management of Faecal Incontinence in Adults, London: Clinical guideline Ref. CG49.

<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 AUDIT OF PATIENTS THAT HAD UNDERGONE A SURGICAL PROCEDURE
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes