

## SACRAL NERVE STIMULATION IN SCOTLAND

### Hypothesis / aims of study

Sacral nerve stimulation (SNS) is now established as a potential treatment for selected patients with faecal incontinence. Incontinence services offering SNS have been running in Edinburgh, Aberdeen, Lanarkshire and Dundee for 2 years. We report the impact on faecal incontinence scores and quality of life in the medium term.

### Study design, materials and methods

Patients with two or more incontinent episodes per week following conservative management were referred for SNS. All patients underwent an SNS test period of two weeks and where there was a 50% reduction in incontinent episodes, a permanent SNS implant was inserted. All patients completed prospectively a Wexner score, Faecal Incontinence Quality of Life (FIQOL) and SF-36 questionnaires, a bowel diary and St Mark's urgency scores prior to insertion and then three monthly.

### Results

85 trial and 73 permanent SNS implants have been inserted. 12 patients had unsuccessful test periods. There have been 3 complications, one wound infection, successfully treated without removal of the implant, and 2 lead migrations managed with pacemaker reprogramming.

At a median follow-up of 10 months Wexner scores significantly improved from 20 to 3 ( $p < 0.01$ ). Urgency scores significantly improved from 3 to 1 ( $p < 0.01$ ). Stool frequency reduced significantly from 8 stools per day to 2 ( $p < 0.01$ ). There was a statistically significant correlation between stool frequency and the Wexner score ( $p < 0.01$ ). There was no significant change in SF-36 scores. FI QOL scores however did significantly improve in all scoring categories. There has been no significant deterioration in any scoring system with longer follow-up.

### Interpretation of results

The mechanism of action of SNS continues to be debated. We have shown a significant decrease in stool frequency, not previously reported. The reduction in stool frequency may be a significant factor in improved continence, reflected in the urgency and Wexner scores. The SF-36 scores provide a broad assessment of mental and physical health and as reported previously may fail to demonstrate improvement with continence improvement. The more focused FIQOL however does significantly improve when continence scores reduce.

### Concluding message

SNS is a safe and effective treatment for faecal incontinence with improved measures of incontinence, urgency and quality of life sustained at medium term follow-up.

<b><i>Specify source of funding or grant</i></b>	<b>None</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Scottish Research and Audit Committee</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>