EVALUATION AFTER TREATMENT OF FAECAL INCONTINENCE WITH SACRAL NERVE STIMULATION

Hypothesis / aims of study
The aim of this study was to evaluate quality of life and satisfaction after treatment with sacral nerve stimulation (SNS), a modulation of the neurological control of the anorectum and gut function.

SNS is a minimal invasive surgery for treatment of faecal or/and urinary incontinence and also for other functional disorders in the GI-tract.

The procedure involves two phases, an acute test phase and a chronic permanent phase.
In the test phase an electrode is implanted through the sacrum and placed close to the S3 or S4 nerves. It is then connected to an external stimulator, This is called percutaneous nerve evaluation (PNE). The patient undergoes stimulation for 3 weeks and if the results are good, a permanent stimulator is implanted (SNS).

At our hospital we have performed PNE and SNS on the indication for faecal incontinence since year 2000.

Study design, materials and methods
Between year 2000 and 2012, 133 patients (113 women and 20 men) were treated with PNE at our hospital. Eighty-five of these (64%) had SNS treatment.

Eighteen patients were excluded from the study group. The reasons for exclusion were: deceased (5), dementia (1), waiting for correction of the electrode (1), effects from another disease (1), not enough effect from the stimulation and pain. In these cases the system has been explanted. (10).

A total of 67 patients (56 women and 11 men) were included in the study. They were sent a questionnaire with 12 questions including questions about quality of life, satisfaction of the treatment and questions about faecal leakage and side effects. No reminders were sent.

Results
Forty-eight of the 67 patients (72%) returned the questionnaire.
Out of these 48 patients 14(29 %) were satisfied, 19(40 %) were partly satisfied with the function. Nine patients (19 %) were not satisfied. 6 patients (12%) did not answer this question.

The patients were asked to grade the total effect of the SNS treatment on a scale from 1 to 5, where 1 is bad and 5 is excellent.
Mean value of the effect of the SNS treatment was 3.3.

Bowel function impact on daily life was evaluated on a 0 to 4 scale (0 is no impact on daily life, 1 is seldom, 2 is sometimes, 3 is often and 4 is daily impact of daily life). The mean value was 2.5. More than 50% of the treated patients were still on some kind of medication for their bowel symptoms.

When asked about feeling of pain from the pacemaker, 4 patients reported feeling pain often, 16 reported feeling pain sometimes and 29 did not feel pain.
Two patients had pain from the stimulation, 8 sometimes had pain from the stimulation and 37 had no pain from the stimulation. No other side effects were reported. The number of answers above are not comparable to the number of patients in the study since some patients have given several answers on one question and some have not answered all the questions.

Interpretation of results
A majority (69%) of the patients were satisfied or partly satisfied with the function of the SNS treatment for faecal incontinence, unfortunately the loss of patients were quite big in this study. The patients rated how satisfied they were with the effect of the treatment on a 1-5 scale. The mean value was 3.3 indicating that they were satisfied with the SNS treatment. We found that after SNS treatment patients still had symptoms of faecal incontinence. The mean value on a 0 to 4 scale was 2.5 indicating that daily life was still affected after SNS treatment. A majority of the patients were still on some kind of medication for their bowel symptoms. One reason that the patients still have symptoms could be that they have had their symptoms for a long period of time before the SNS treatment. Earlier diagnosis and treatment of faecal incontinence could be of value to improve the quality of life for this patient group, but this needs to be further studied.

Concluding message
In this study a vast majority (69%) of the patients were satisfied or partly satisfied with the SNS treatment even though they still had faecal leakage. According to this study SNS treatment should be considered in some patient groups when first line treatment has failed.

Disclosures
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