# SACRAL NEUROMODULATION FOR ANORECTAL PAIN

## Hypothesis / aims of study

Anorectal pain is very distressing for patients and has enormous impact on quality of life. It is defined as constant severe pain in the anorectal region and might be accompanied by constipation or fecal incontinence or urinary retention or incontinence. This study focusses on the effectiveness of sacral neuromodulation on this anorectal pain.

## Study design, materials and methods

All patients which were referred to our centre for anorectal pain between May 2005 and January 2012 were included in this retrospective study. Radiological and functional diagnostics did not show any pathological cause of anorectal pain. Previous treatment prooved to be unsuccesful. Visual Analog Scores (VAS) were used to assess symptoms. All patients were screened by use of percutaneous nerve evaluation (PNE). Effectiveness of PNE was assessed by comparison of VAS scores at baseline with the ones during treatment. The PNE was considered succesfull when VAS scores deceased more than 50% or VAS score during treatment was < 3. All patients with succesful PNE had a definite SNM system implanted. Patients with an implanted stimulator had an evaluation one year after implantation.

## Results

Between May 2005 and January 2012 in our centre a total of 23 patients with anorectal pain was screened for SNM with PNE. Of 7 of these patients detailed VAS scores were not available, so 16 patients were included in this analysis. 69% was female and mean age was 61.5 years. Average VAS at basline was 7.83 (6.2 - 9). 6 out of 16 patients (37.5%) had a succesfull PNE. For these 6 patients average decrease in VAS was 6.65 (4.5 - 9). For the patients with unsuccesfull PNE average decrease in VAS was 0.4 (0 - 2.6). All patients with succesfull PNE had subsequently a permanent stimulator implanted. Treatment was still succesfull for 4 patients after respectively 2 up to 5 years. In two patients the stimulator was explanted because of lack of effectiveness and complaints of pain from the pocket and infection.

ID	Gender male = 0	Age	VAS Baseline	VAS PNE	VAS difference	PNE success yes = 1	Implant yes = 1	Last follow up
1	1	34	9	0	9	1	1	2007 explanted
2	1	46	9	1	8	1	1	2011 success
3	0	57	8	8	0	0	0	
4	0	58	7	2	5	1	1	2011 success
5	1	45	7	6,4	0,6	0	0	
6	1	70	6	1	5	1	1	2011 success
7	1	69	9	9	0	0	0	
8	1	63	6,2	3,6	2,6	0	0	
9	1	68	9	0,6	8,4	1	1	2010 explanted
10	0	72	6	6	0	0	0	
11	1	63	8	3,5	4,5	1	1	2012 success
12	1	86	8,5	8,5	0	0	0	
13	1	43	8,5	7	1,5	0	0	
14	0	65	8,5	8,5	0	0	0	
15	1	67	8	8	0	0	0	
16	0	78	7,5	7,5	0	0	0	

#### Interpretation of results

This study shows a 35% success rate of PNE in patients with anorectal pain. Definite implantation appears to be successfull, this effect can be maintained on the long term. Limitations of this study and research regarding anorectal pain in general is the fact that symptoms are poorly defined. This leads to heterogeneity in the studypopulation, which makes it unplausable all patients benefit from the same therapy. Moreover, because the aetiology as well as the exact mechanism of action of sacral neuromodulation is unknown, it is hard to predict which patients are expected to benefit from this thearapy.

#### Concluding message

Even when the successrate is only 35% it is justified to perform PNE in patients when all other treatments failed. If successful there is a fair chance the beneficial effect will last.

#### **Disclosures**

Funding: none Clinical Trial: No Subjects: HUMAN Ethics not Req'd: Results from a treatment were retrospectively collected and assessed Helsinki: Yes Informed Consent: No