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 focuses 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 proved to be unsuccessful. 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 successful when VAS scores deceased more than 50% or VAS score during treatment was < 3. All patients with successful 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 baseline was 7.83 (6.2 – 9). 6 out of 16 patients (37.5%) had a successful PNE. For these 6 patients average decrease in VAS was 6.65 (4.5 – 9). For the patients with unsuccessful PNE average decrease in VAS was 0.4 (0 – 2.6). All patients with successful PNE had subsequently a permanent stimulator implanted. Treatment was still successful 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.

Interpretation of results
This study shows a 35% success rate of PNE in patients with anorectal pain. Definite implantation appears to be successful, 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 study population, which makes it unplausible 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 therapy.

Concluding message
Even when the success rate 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
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