

THE IMPACT OF DURATION OF COMPLAINTS ON SUCCESSFUL SACRAL NEUROMODULATION OUTCOME

Hypothesis / aims of study

Sacral neuromodulation (SNM) has evolved as an effective treatment option for overactive bladder syndrome (OAB) with or without urinary urgency incontinence and non-obstructive urinary retention (NOR). SNM is recommended after conservative treatment failure. The success of SNM can depend on several different factors, but little is known about these predictive factors. A more reliable selection of eligible patients to increase the treatment success rate would be valuable. The purpose of this study was to evaluate whether the duration of complaints before performing SNM (test period), predicts success of SNM treatment.

Study design, materials and methods

All patients that underwent a SNM test period evaluation between 2011 and 2014 were included in this retrospective cohort study. The duration of complaints was listed in three categories: a) 0 until 5 years, b) 5 years until 10 years and c) 10 years or longer. Analyses with chi-square tests were performed to evaluate whether the duration of complaints before SNM are associated with success of SNM.

Results

The included patients consisted of 42 males and 89 females; in total 131 patients. Mean age at the moment of SNM test was 49.1 (SD 14.5). The group included 67 OAB-wet, 12 OAB-dry and 52 NOR patients. SNM test period was successful in 56% (n=74) of the total group. Most patients had a complaint duration of 0 until 5 years (n=60) and 30 patients had a complaint duration of 5 until 10 years, 41 patients had complaints since at least 10 years. Analyses with χ^2 -tests showed that the duration of complaints is not significantly associated with success of SNM ($p=0.752$). Subdivided per indication, OAB-wet or -dry or NOR, also no significant associations were present ($p=0.402 - 0.545 - 0.559$).

Interpretation of results

In this study duration of complaints was not a predictive factor for SNM treatment success (or failure). Variables like sex, age at test stimulation and neurological status should be taken into account in future studies.

Concluding message

Based on the evaluation in this study there is no relationship between duration of complaints and success of SNM neither in the OAB, nor in the NOR group. SNM seems to remain a feasible treatment option, despite of possible anatomical or physiological changes within the lower urinary tract. Hence duration of complaints does not seem to be a predictive factor for the outcome of SNM therapy. Even in a group with more than 10 years of lower urinary tract complaints, sacral neuromodulation treatment appears equally successful than in a group of patients with a more recent onset of complaints.

Table 1. SNM test period being successful or unsuccessful; categorised by duration of complaints.

		SNM: successful		Total
		yes	no	
Complaint duration in years	0 until 5 years	33	27	60
	5 until 10 years	17	13	30
	more than 10 years	24	17	41
Total		74	57	131

Disclosures

Funding: n.a. **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It is a retrospective database study. **Helsinki:** Yes **Informed Consent:** No