

IS SACRAL NEUROMODULATION WITH INTERSTIM THERAPY A VALUABLE OPTION IN A MALE POPULATION WITH REFRACTORY LUTS?

Hypothesis / aims of study

Sacral neuromodulation is an established therapy for refractory urgency, urgency incontinence and non-obstructive bladder emptying disorder. In published literature only a minority of patients is male. Male patients probably have a lower implant rate after test stimulation, but a similar course with a definitive implant (1). Our aim was to analyse the implant rate and long term outcome of our male subgroup of patients and to compare these results to our female patient group.

Study design, materials and methods

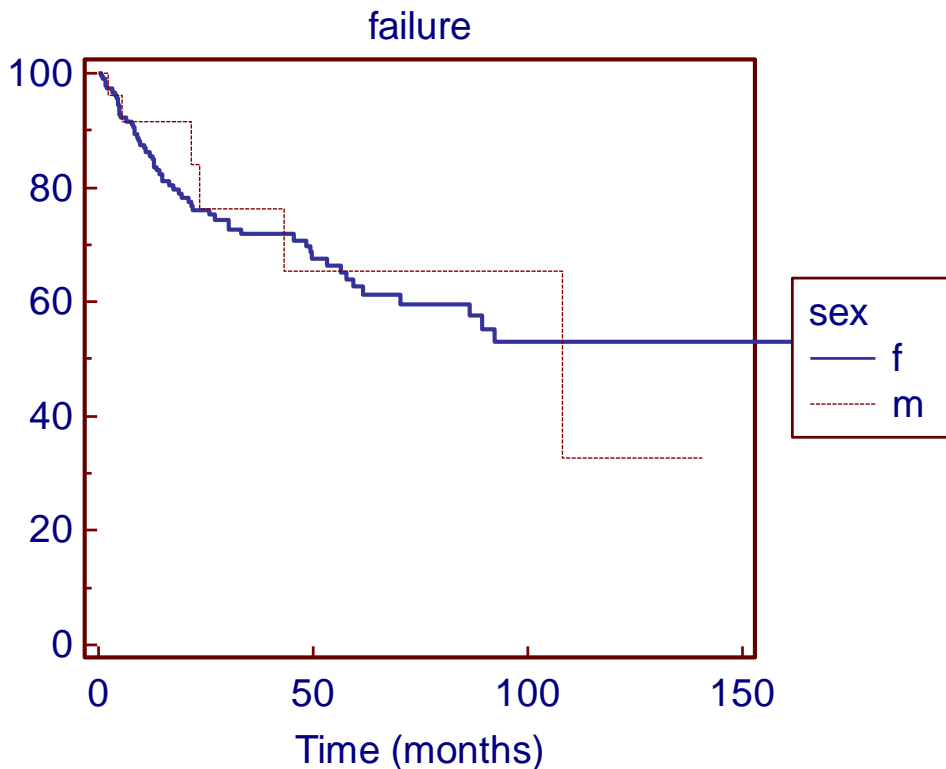
We report a retrospective single tertiary centre analysis of male patients who underwent sacral neuromodulation (Interstim therapy) between 1996 and 2010. All patients underwent a percutaneous test stimulation (PNE) under local anaesthesia. **When a lead dislocation occurred, a tined lead was placed under general anaesthesia for further testing.** Electronic patient files were reviewed for "hard" end points (percutaneous test stimulation, definitive implant, revision, explant), for objective (micturition diary, n pads, n catheterizations) and subjective (patient satisfaction) outcome parameters. Longitudinal follow up data of implanted cases are analysed. Interstim therapy was considered successful if the initial 50 % or more improvement in any of primary voiding diary variables persisted compared to baseline. If patients did not meet these criteria or if an explant occurred, therapy was considered a failure at that time point. The data are compared to our data on female patients.

Results

77 male patients underwent a PNE. **4 patients underwent a tined lead test stimulation after lead dislocation of the temporary lead.** 32 of these patients underwent a definitive implant of an Interstim device (42%). The implant rate in males is significantly lower as compared to females in our series (187/305, 61%, $p = 0.003$, chi square test).

The estimated overall median survival of Interstim therapy in males is 108 months (Kaplan-Meier method). There is no significant difference between male and female patients in overall survival ($p = 0.95$, logrank test; Hazard ratio 1.03; Figure 1).

As in females, male patients with non-obstructive bladder emptying disorder have persistent good response to Interstim therapy. In our series, 1 patient out of 7 had a failure after 108 months. In the U/UII group, a median survival of 43 months was found.



Interpretation of results

Male patients have a significantly lower implant rate after percutaneous test stimulation as compared to female patients. Whether this is based on real sex differences or on selection bias is to be debated. The generalized use of tined leads in a test setting could increase response and implant rates. In general, few male implants are performed (15% of implants in our series).

When a positive test stimulation is found, the definitive treatment has equal success rates as compared to females. As such, general pro's and con's for sacral neuromodulation are applicable to the male population.

Concluding message

Sacral neuromodulation is a valuable treatment option in males with refractory LUTS. The chances of having a definitive Interstim device is lower in a male population as compared to a female population. Once this selection has occurred, male patients fare as well as females with this therapy.

Category:

LUTS in men

References

1. Vaarala et al. Scand J Urol Nephrol. 2001;45(1):46-51

Disclosures

Funding: no funding **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** retrospective chart review **Helsinki:** Yes
Informed Consent: No