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NEUROMODULATION FOR SENSORY URGENCY AND URGE INCONTINENCE

Aims of Study: Conservative treatment of sensory urge incontinence has disappointing outcome in many cases. External electrostimulation for neurogenic urgency proved to be an effective treatment. It was conjectured that for non-neurogenic patients with sensory urgency with or without urge incontinence this neuromodulation treatment might be effective as well.

Patients and methods: Fifty-seven patients (48 women and 9 men) with sensory urge incontinence (34 patients) or sensory urgency without incontinence (23 patients) were treated. The women aged 19-81 years (mean 50.8 years), the men 59-78 years (mean 62.7 years). Vaginal or anal electrostimulation was performed with 20 Hz pulses of maximum tolerable amplitude (up to 95 mA) during 15 sessions of 20 minutes each during a 3-week period. Urodynamic investigations were performed and voiding diaries were recorded before and after treatment, and the patients' condition was checked after an average follow-up of 3 years.

Results: The bladder volume at first sensation (134 → 199 ml) and the cystometric capacity (333 → 404 ml) increased significantly after the treatment. Parallel to these findings, the diurnal voiding frequency reduced from 10.4 to 6.7, and nocturia from 2.7 to 1.1. These changes were significant, too. No changes were observed in detrusor compliance, maximum voiding pressure, voided volume, and residual urine. With a mean follow-up of 3 years after treatment, 27 patients with sensory urge incontinence stated they still were cured (79%), and 19 patients with sensory urgency (83%).

Conclusion: Maximal electrostimulation is a simple and reliable physiological therapy. In the patient group with sensory urgency with or without incontinence it is an effective treatment in about 80% of the population. The sensations of bladder filling are substantially inhibited after treatment. This inhibition appears to persevere over a long time after treatment. Based on the results of this study, this type of neuromodulation might be considered the therapy of first choice for this patient group.