

Urgent[®] PC Clinical Data

Vandoninck, V., van Balken, M.R., Finazzi-Agró, E., Petta, F., Micali, F., Heesakkers, J.P.F.A., et al. (2003). Percutaneous tibial nerve stimulation in the treatment of overactive bladder. Urodynamic data. *Neurourology and Urodynamics*, 22, 227-232.

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AIM: The aim of this study was to evaluate urodynamic changes after percutaneous tibial nerve stimulation (PTNS) for the treatment of complaints related to overactive bladder syndrome and to search for urodynamic-based predictive factors.

METHODS: Ninety consecutive patients with symptoms related to overactive bladder syndrome were enrolled in this study. Patients underwent 12 PTNS sessions. For evaluating objective success, the primary outcome measure was a reduction in number of urinary leakage episodes of 50% or more per 24 hours. Patients' request for continuation of therapy was considered subjective success. This study focused on urodynamic features at baseline and on changes found after 12 PTNS treatments.

RESULTS: The objective success rate was 56% (leakages/24 hours). Subjective success rate was 64%. Frequency/volume chart data and quality of life scores improved significantly ($P < 0.01$). Pre- and posturodynamic data were available from 46 participants. Detrusor instabilities (DI) could be abolished in a few cases only. Increments in cystometric bladder capacity and in volume at DI were significant ($P = 0.043$ and 0.012 , respectively). Subjects without detrusor instabilities at baseline were 1.7 times more prone to respond to PTNS (odds ratio, 1.75; 95% confidence interval [CI], 0.67-4.6). The more the bladder overactivity was pronounced, the less these patients were found to respond to PTNS, the area under the receiver operating curve was 0.644 (95% CI, 0.48-0.804).

CONCLUSION: PTNS could not abolish DI. PTNS increased cystometric capacity and delayed the onset of DI. Cystometry seemed useful to select good candidates: patients without DI or with late DI onset proved to be the best candidates for PTNS.

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