www.urotodayinternationaljournal.com Volume 2 - April 2009

# A Randomized Controlled Study of Posterior Tibial Nerve Stimulation for Overactive Bladder

Paulo Palma, Patrícia Bellette, Viviane Hermann, Cássio Riccetto

Universidade Estadual de Campinas, Sao Paulo, Brazil - Submitted on January 13, 2009 - Accepted for Publication on February 9, 2009

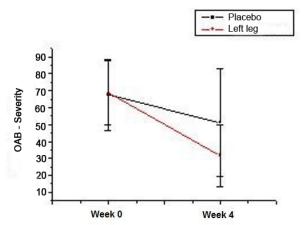
## INTRODUCTION

The aim of this study was to evaluate the safety and efficacy of electrical stimulation of the posterior tibial nerve (PTNS) in women with overactivity bladder symptoms (OAB) and to assess the impact on the quality of life (QoL) using the Overactivity Bladder Questionnaire (OABq-SF).

### **METHODS**

Thirty seven women with OAB were enrolled in this prospective, controlled and randomized trial. After screening for inclusion and exclusion criteria, they were randomly placed into one of two groups: (1) Treatment group (n = 21): women were submitted to PTNS; (2) Control group (n = 16): women had electrodes placed, without turning on the generator. Pre treatment, all patients underwent a physiotherapeutic evaluation that included completing a urinary diary for quantification of overactivity bladder symptoms and the OABq-SF. The treatment group received 8 sessions of electrical stimulation of the posterior tibial nerve, twice per week. Statistical analysis was made using analysis of variance. Statistically significant differences were reported at p < .05.

Figure 1. OAB Severity Scores Pre and Post Treatment doi:10.3834/uij.1944-5784.2009.04.03f1



## **RESULTS**

There were statistically significant differences in OAB symptoms in the treatment group. There was a marked and significant decrease in urgency (ie, to 62.50% in the control group and to 42.80% in the treatment group). QoL also significantly improved in the treatment group.

Differences in OAB severity scores and nocturia between the start of the investigation and week 4 are displayed in Figures 1 and 2, respectively. The OAB severity score and nocturia were both significantly reduced in the treatment group.

# CONCLUSION

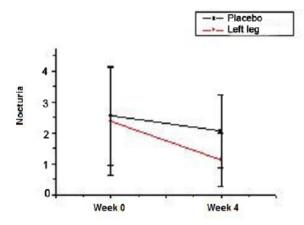
The authors demonstrated that PTNS is a safe and effective alternative in the management of idiopathic OAB.

# **CORRESPONDENCE**

Paulo Palma, MD, PhD, Department of Urology, Rua Jose Pugliesi Filho 265, Campinas, Sao Paulo, Brazil 13085-415

Email: ppalma@uol.com.br

Figure 2. Nocturia Ratings Pre and Post Treatment doi:10.3834/uij.1944-5784.2009.04.03f2



TO CITE THIS ARTICLE: Palma P, Bellette P, Hermann V, Riccettoc A. A randomized controlled study of posterior tibial nerve stimulation for overactive bladder. UIJ. 2009 Apr;2(2). doi:10.3834/uij.1944-5784.2009.04.03