INTRODUCTION: Overactive bladder affects many women, with deeply personal and economic costs. Although antimuscarinic drugs can cause a reduction in voiding symptoms, the effect is modest, and many patients are intolerant of the side effects, or do not experience sufficient relief. For these patients, the modulation of bladder reflex pathways via percutaneous tibial nerve stimulation (PTNS) or via implanted sacral nerve stimulation (SNS) has been acknowledged as a logical next step in the algorithm of care.

AIMS: To assess the effectiveness of percutaneous tibial nerve stimulation (PTNS) on patients with overactive bladder syndrome.

MATERIALS AND METHODS: 20 women with symptoms of urgency, frequency, urge incontinence without genital prolapse and with no response to anticholinergic treatment and behavioural modification were enrolled in the study (median age 55.3 years). Weekly PTNS in 30 min sessions for 12 weeks was performed. Urogynecologic symptom assessment of quality life parameters was obtained with 24 hours bladder diaries and QoL questionnaires and translabial ultrasonography to assess the bladder wall thickness were performed at the beginning, 6 weeks and 12 of treatment.

RESULTS: The objective success rate was 70%. In the positive responders, the median daytime and nocturnal frequency was reduced by half after 6 weeks of treatment and the patients reported fewer urge leak episodes per 24 hours.

PTNS does not have any effect on the bladder wall thickness despite positive effects on bladder diary, pad test, and quality of life in overactive bladder syndrome.

CONCLUSION: This study confirmed the results of previous studies indicating that PTNS therapy is a safe and effective treatment.