

MacDiarmid, S.A., Peters, K.M., & Wooldridge, L.S. (2010). Percutaneous tibial nerve stimulation for the treatment of overactive bladder: treatment interval frequency. Poster, Society for Urodynamics and Female Urology, St. Petersburg, FL.

INTRODUCTION AND OBJECTIVES: The Overactive Bladder Innovative Therapy (OrBIT) Trial Phase 2 demonstrated the long term effectiveness of percutaneous tibial nerve stimulation (PTNS) for the treatment of overactive bladder (OAB). Symptom improvements after 12-weekly PTNS treatments were sustained throughout 12 months of therapy. The objective of this study was to evaluate the treatment interval frequency necessary to maintain efficacy.

METHODS: After 12 weeks, PTNS responders were treated for an additional 9 months of therapy at tapered intervals. Frequency of PTNS was determined by subject OAB symptom control and symptom deterioration. Voiding diaries and Overactive Bladder Questionnaires (OAB-q) were completed at baseline, 12 weeks, and 6 and 12 months. Outcome measures included voiding frequency, urinary urge incontinence episodes, urgency episodes, and voids causing waking, volume per void, and quality of life indices. Subjects completed Global Response Assessments (GRA) at 12 weeks, 6 and 12 months.

RESULTS: 35 subjects continued PTNS therapy after an initial 12 weekly treatments. Thirty-two and 25 subjects completed voiding diaries at 6 and 12 months, respectively. All objective improvements in voiding diary variables demonstrated at 12 weeks were sustained at 6 and 12 months. Subject GRA similarly demonstrated sustained improvements with 94% reporting sustained GRA improvement from 12 weeks. The mean number of days between treatments was 21 days from 12 week visit through 12 month visit. For the 25 subjects who completed 9 months follow-up, 24% (6/25) received ≤ 10 treatments, 72% (18/25) received 11-20 treatments, and 4% (1/25) received ≥ 21 treatments. The mean number of PTNS treatments per month were as follows: 4 per month during initial 12 weeks of therapy, 1.9 per month from months 3-6, 1.4 per month from months 6-9, and 1.2 per month from months 9-12.

CONCLUSIONS: PTNS sustained efficacy was demonstrated over 12 months following initial success at 12 weeks. Subjects only required an average of ≥ 1 treatment monthly to sustain therapeutic effects throughout 12 months. This demonstrates long term efficacy of PTNS.

Source: Original Poster