

ASSESSMENT OF POSTERIOR TIBIAL NERVE STIMULATION EFFECTIVENESS IN PEDIATRIC OVERACTIVE BLADDER: A MOROCCAN STUDY

El Beloui Ryme, Kyal Nada, Boutalja Hasnaa, Lmidmani Fatima, El Fatimi Abdellatif

CHU Ibn Rochd, Morocco
e-mail: el.ryme@gmail.com

Background and Aims

Transcutaneous tibial nerve stimulation (TTNS) has shown efficacy in treating overactive bladder syndrome (OAB). This study evaluates its effectiveness in improving OAB parameters in a pediatric population.

Methods

A prospective study included 46 children with refractory (non-responsive to the medical and rehabilitation treatments) non-neurogenic OAB treated with daily 20-minute TTNS sessions (5/week, 10 Hz, 2000 ms). Voiding diary and uroflowmetry data were assessed at 1 and 6 months.

Results

46 children were included (27 girls, 19 boys), with a mean age of 12.7 ± 1.9 years. All patients had OAB syndrome and underwent renal bladder ultrasound and urodynamic evaluation, which showed no detrusor overactivity on cystomanometry. A 3-day voiding diary was completed. The average TTNS duration was 7 months, with 6 children lost to follow-up. At 1 month, improvements were observed in voiding diary and uroflowmetry parameters. At 6 months, OAB had resolved in 28 children, while 39.14% still had urinary frequency and urgency without incontinence.

Conclusion

TTNS is a promising therapeutic option for managing OAB syndrome in non-neurogenic bladder due to its non-invasive nature and ease of use. Further studies are needed in this area.

Keywords: urodynamic, tibial nerve stimulation