

NUMBER OF SESSIONS OF PARASACRAL TENS TO COMPLETE RESOLUTION OF OVERACTIVE BLADDER IN CHILDREN. DOES IT MATTER?

Hypothesis / aims of study

Children with overactive bladder (OAB) has been treated successfully with by 20 sessions of parasacral TENS. However, this number (20 sessions) is empirical and there is no study to demonstrate whether this is not enough or otherwise is more sessions than necessary. The aim of this study is to identify the number of sessions of parasacral TENS needed to achieve complete response of symptoms in children with OAB.

Study design, materials and methods

We evaluated our database of patients collected prospectively. Only patients with isolated OAB were included. All patients should have symptom of urgency, low postvoid residue and a bell shape curve in the uroflowmetry. The children were treated with 20 sessions of parasacral TENS, for 20 minutes, 3 times per week. The device used was the Dualpex Uro 961 , biphasic current, frequency 10 Hz , pulse width of 700 μ s . The evaluation of symptoms was performed by Visual Analog Scale (0 to 10). Was considered complete resolution if the patients achieved the score 10. The outcome of each session was assessed.

Results

69 patients (42, 60.9 %) girls with a mean age of 8.44 (\pm 3.05) years were analyzed. The cure rate in each session was for 20th session- 38 (55.1 %), 19th session- 30 (43.5 %); 18th and 17th session- 27 (39.1%), 16th session- 22 (31. 9%), 15th and 14th session- 18 (26.1%); 13th- 14 (20.3%) , 12th and 11th session- 11 (15.9%); 10th session - 12 (17.4 %), 9th session- 7 (10.1%)- 8th session- 8 (11.6%) , 7th session- 7 (10.1%), -5th session- 5 (7.2%) , 6th session- 6 (8.7%); 4- 03 session- 2 (2.9 %), 2nd or less sessions- 0 %. After achieving 100% of complete response, 12 (17.4%) reported worsening but all achieve again complete response afterwards.

Interpretation of results

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Concluding message

This study is the first to assess the outcome of neuromodulation each session. We noted that one can have complete symptom resolution already from the third session. The complete response rate progressively increases with the number of sessions and a small percentage (17 %) can still have the symptoms worsened despite a complete initial improvement. At the 10th session (half treatment) only 10 % had had complete and the end of treatment 55 % had a complete response. These results demonstrate that a minimum of 20 sessions are required and would likely be even more necessary in many cases.

Disclosures

Funding: Fundação de Amparo à Pesquisa da Bahia(FAPESB) and CNPq **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Comitê de Ética em Pesquisa da Escola Bahiana de Medicina **Helsinki:** Yes **Informed Consent:** Yes