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## Introdução e Objetivo

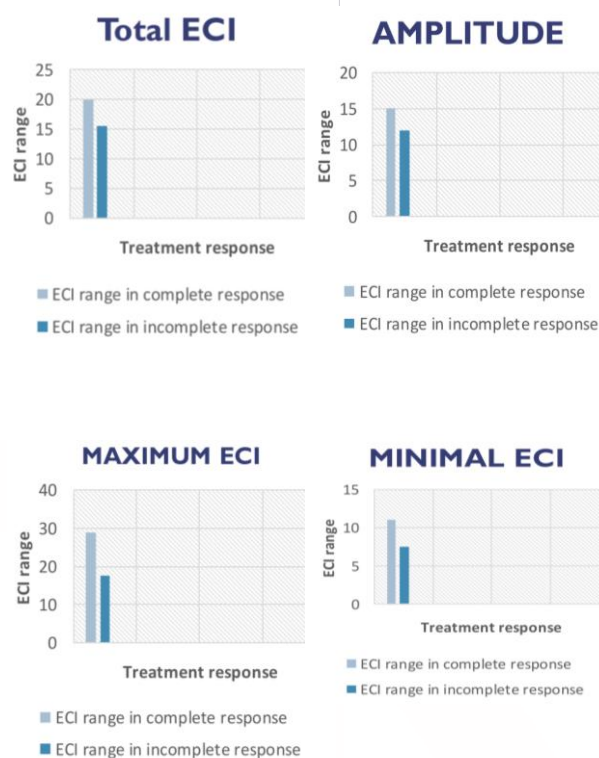
Parasacral TENS is a noninvasive electrical stimulation technique used in the treatment of children with Bladder and Bowel Dysfunction (BBD). Although improvement in constipation has been demonstrated, the effect of electrical intensity of electrical stimulation on the treatment of constipation has never been evaluated. Our aim is to investigate the relationship between the intensity of the electrical pulse used in parasacral TENS and its effect on improving constipation in children with BBD.

This study aims to evaluate the influence of electrical current intensity (ECI) on Functional Constipation (FC) in patients treated with parasacral TENS.

## Método

A retrospective analysis of children diagnosed with BBD, aged between 3 and 17 years, who completed twenty 3x/week sessions of parasacral TENS plus urotherapy was performed. A biphasic electric current of frequency equal to 10Hz and pulse width of 700 $\mu$ s was applied through two electrodes positioned bilaterally in the parasacral region. The ICE was specific for each patient's motor and sensory thresholds. FC was assessed pre- and post-treatment using Rome IV criteria.

## Figuras



## Resultados

Thirty-seven children with a mean age of  $8.08 \pm 2.87$  years were studied, 20 (54.1%) of whom were female. At the end of treatment, 27 (73%) patients were not constipated. The total, maximum, minimum, and median ECI amplitude were 17.94(IQR12.84 - 23.24), 26(IQR 8.6 - 32), 10(IQR 7-15), and 14(IQR 11 - 17.5) respectively. There was a difference between the medians of the ECI in the resolution and non resolution of the symptoms: total (19.81 IQR 14.26 - 23.74,  $p=0.01$ ), maximum (29 IQR 22-34 X 17.5 IQR 15 - 23.75,  $p=0.002$ ), and minimal (11 IQR 7-15 X 7.5 IQR 4.75-9.25,  $p=0.02$ ). The amplitude was not different between the groups ( $p=0.05$ ). There was no association/correlation between sex/age and the ICE range.

## Conclusão

Higher ECI is associated with FC resolution in children with BBD treated with parasacral TENS. Age and sex are not related to ICE.

## Referências

de Abreu GE, de Souza LA, da Fonseca MLV, Barbosa TBC, de Mello ERD, Nunes ANB, Barroso UO Jr. Parasacral Transcutaneous Electrical Nerve Stimulation for the Treatment of Children and Adolescents with Bladder and Bowel Dysfunction: A Randomized Clinical Trial. J Urol. 2021 Jun;205(6):1785-1791. doi: 10.1097/JU.0000000000001579. Epub 2021 Feb 2. PMID: 33525925.