Headache Medicine

Assesment of response of peripheral nerve blocks in patients with headache in a tertiary service in Fortaleza

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Introdução

Headache is one of the most prevalent, disabling and undertreated conditions of humanity. The performance of peripheral nerve blocks with anesthetic is a practice that has grown among neurologists, especially those who deal more with headaches, in the last 20 years. This minimally invasive procedure aims to interrupt nerve conduction in the peripheral nervous system to relieve headaches, which can last from weeks to months. There is no consensus on how the technique should be used, as well as the type of local anesthetic, the use of corticosteroids, frequency and interval between applications. Finally, each center performs the peripheral nerve block according to its local protocol, in view of the scarcity of robust studies on the subject. The most commonly nerves included in the block are the greater occipital, lesser occipital and branches of the trigeminal nerve, such as the supraorbital, supratrochlear, and auriculotemporal nerves. Among the main indications of this procedure are the prophylactic and abortive treatment of primary and secondary headaches, especially migraine and trigeminal-autonomic headaches.

Objective

To evaluate the peripheral nerve blocks response in patients with headache. Methods: This is a retrospective cohort of 49 patients followed at the headache outpatient clinic of the Hospital Geral de Fortaleza (HGF) who underwent peripheral nerve block with anesthetic between january and may 2023. It was evaluated by the HIT-6 questionnaire and the number of days of pain per month, analyzed before and at least 4 weeks after the blockade. During follow-up, 16 patients could not be contacted for reassessment. The McNemar test was used for dichotomous variables between two dependent groups and the Wilcoxon test for the ordinal variables. SPSS software for Macintosh version 23.0 performed the analysis.

Results

81.6% of the patients had a severe HIT-6 (60-78 points), 8.2% intense (56-59 points), 6.1% moderate (50-55 points) and 4.1% mild (36-49) in the pre-blockade evaluation. Post-blockade evaluation shows that 27.3% of the patients scored it as severe, 18.2% as intense, 30.3% as moderate and 24.2% as mild. The majority (85.7%) of the patients had more than 15 days of pain in the month before the blockade. In the post-blockade evaluation, 69.7% of the patients had less than 15 days of pain in the month. There was a significant reduction in the disability caused by headache in the evaluated patients, with a decrease in the percentage of severe scores and an increase in the percentages related to mild and moderate scores after peripheral nerve blocks. Additionally, there was a reduction from 85.7% to 30.3% of patients with more than 15 days of pain per month after the blockade. These data denote an improvement in the patient's quality of life, considering the decrease in disability and in the number of days of pain, showing that this procedure is a good alternative treatment for patients with headache. However, we must consider the methodological limitations from a study without a control group to exclude, for example, the placebo effect.

Conclusion

Peripheral nerve blocks proved to be effective in the treatment of headaches, reducing disability and the number of days of pain per month in most patients.

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