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Special Article - Migraine

Physical Therapy and Migraines

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Editorial

The study of effective techniques for migraines is justified by its high prevalence; a systematic review (Woldeamanuel and Cowan, 2017) concluded that it affects 1 out of 10 individuals worldwide, with preference in gender for females in comparison with males, in a ratio 2:1.

One of the reasons that promotes the use of physical therapy in the treatment of these patients is the concurrence of musculoskeletal dysfunctions in the neck in patients with migraines; a recent study [1], concluded that 89% of the patients with migraines included in the study reported local or referred pain in the head during the realization of pressure on the high cervical segment.

In [2], a study about the prevalence of neck pain in patients with migraines observed it was of 76% during the year of the study.

In the most recent study about this topic [3], findings from the exploration of the cervical spine in patients with migraine and controls were compared and concluded that significant differences existed in the number of active trigger points, in the flexion-rotation test, joint mobility in the high cervical segment, in the crane cervical test and in the reproduction and resolution of symptoms during sustained pressure; also, 93% of the patients with migraine presented at least three cervical musculoskeletal dysfunctions .

The neurophysiologic relation between the cervical spine and headaches in migraines is found at the Trigeminal-Cervical Complex (TCC). This complex is in charge of transmitting sensorial, visceral and nociceptive information of the head and orofacial region to superior centers like the thalamus, hypothalamus, and the primary sensorial cortex [4]; this complex receives afferent nociceptive signals from cervical structures; this convergence of nociceptive signals seems to be the cause of the central and peripheral sensitization phenomenon [5], present in migraine. The concurrence of peripheral nociceptive mechanisms and the central sensitization can justify the results from Watson & Drummond (2014); in this study, 20 patients with migraine received sustained pressure on C1 and C2; in 19 cases it reproduced the symptoms of their migraine.

Sufficient studies can be found in the scientific literature that demonstrates the efficacy of physical therapy interventions in patients with migraine. In a systematic review of controlled randomized clinical trials that included therapeutic exercise as the principal treatment in patients with migraine [6], concluded it was effective in the diminution of frequency and duration of headaches.

In a clinical trial of 2015 [7], the effectiveness of pharmacological treatment VS. Pharmacological treatment + positional liberation technique was compared in 44 patients with migraines and active trigger points in the cervical region; the study concluded that the group who received positional liberation treatment decreased the intensity, frequency and duration of pain.

In another randomized clinical trial published in 2016 [8], 50 females diagnosed of migraines were randomly divided into two groups, the first received pharmacological treatment and the second had manual therapy, stretching and pharmacological treatment; the second group obtained better results in the pain pressure threshold and patient satisfaction.

It is necessary to improve the methodological quality of the studies to increase their evidence [9].

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