META-ANALYSIS THE EFFECT OF POST ISOMETRIC RELAXATION ON UPPER TRAPEZIUS MYOFASCIAL PAIN SYNDROME

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ABSTRACT

Background: Myofascial pain syndrome (MPS) is a common clinical problem, arising from the muscle and produces sensory, motoric, and autonomic symptoms. They are caused by myofascial trigger points which are focal areas of tenderness caused by hypercontracted muscle tissue. Post-isometric relaxation is a manual therapy technique suggested in the treatment of myofascial trigger points. The purpose of this study was to examine the effect of post isometric relaxation on upper trapezius myofascial pain syndrome.

Subjects and Method: A systematic review and meta analysis was conducted by collecting articles from PubMed, Science Direct, Google Scholar, and PEDro databases. The determination of selected articles based on eligible criteria using PICO: (1) Population= individu aged 18-65 years, (2) Intervention= post isometric relaxation, (3) Comparison= other therapy, and (4) Outcome= upper trapezius myofascial pain syndrome. Keywords used (“MPS Upper Trapezius” OR “Myofascial pain syndrome upper trapezius”) AND (“PIR” OR “Post isometric relaxation”) AND “randomized contrlled trial”. The inclusion criteria were full text, randomized controlled trial study, published from 2010 to 2020, and reported Mean and SD. The articles were collected by PRISMA flow diagram. The selected articles were quantitatively examined by Review Manager 5.3.

Results: A meta-analysis involved 9 studies showed that post isometric relaxation reduced upper trapezius myofascial pain syndrome, but it was statistically non-significant (SMD= 0.18; 95% CI= -0.36 to 0.72; p= 0.510).

Conclusion: Post isometric relaxation reduces upper trapezius myofascial pain syndrome, but it is statistically non-significant.

Keywords: post isometric relaxation, laser therapy, upper trapezius myofascial pain syndrome

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