Effect of Physical Exercise Programs on Myofascial Trigger Points–Related Dysfunctions: A Systematic Review and Meta-analysis

Guzman-Pavon, M.J.
Cavero-Redondo, I.
Martınez-Vizcaıno, V.
Fernandez-Rodrıguez, R.
Reina-Gutierrez, S.
Alvarez-Bueno, C.

Abstract
Objective. Myofascial pain syndrome is one of the primary causes of health care visits. In recent years, physical exercise programs have been developed for the treatment of myofascial trigger points, but their effect on different outcomes has not been clarified. Thus, this study aimed to assess the effect of physical exercise programs on myofascial trigger points. Methods. A systematic search was conducted in Pubmed, Web of Science, and Scopus. Articles analyzing the effect of physical exercise programs on pain intensity, pressure pain threshold, range of motion, and disability were included. Risk of bias was assessed using the Cochrane RoB2 tool. The DerSimonian-Laird method was used to compute the pooled effect sizes (ES) and their 95% confidence interval (95% CI) for pain intensity, pressure pain threshold, range of motion, and disability. Results. A total of 24 randomized controlled trials were included in this systematic review and meta-analysis. The pooled ES were –0.47 (95% CI = –0.61 to –0.33) for pain intensity, 0.63 (95% CI = 0.31 to 0.95) for pressure pain threshold, 0.43 (95% CI = 0.24 to 0.62) for range of motion, and –0.18 (95% CI = –0.45 to 0.10) for disability. Conclusions. Physical exercise programs may be an effective approach in the treatment of pain intensity, pressure pain threshold, and range of motion among patients with myofascial trigger points.

Author keywords
Exercise
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