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Investigation of the Effects of Dry Needling With Stretching Upper Trapezius Muscle on Clinical Outcomes in Participants With Active Myofascial Trigger Point.

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Abstract : Introduction: Myofascial trigger point (MTrP) is one of the most common sources of musculoskeletal pain. Approximately 30-85% of the patients with musculoskeletal pains would experience MTrP in their life. The prevalence of MTrP has reported in the patients seen in a general orthopedic clinic, general medical clinic and specialty pain management centers, 21%, 30% and 93% respectively. Nowadays, dry needling is suggested as a standard treatment for MTrPs. The purpose of the present study was to examine the effectiveness of dry needling with stretching upper trapezius muscle on pain and pain pressure threshold in participants with active myofascial trigger point. Methods: Thirty participants with an active myofascial trigger point of the upper trapezius muscle were randomly divided into two groups: dry needling with passive stretch (n=15) and passive stretch alone (n=15). They received 5 sessions of the treatments for three weeks. The outcomes were pain intensity and pain pressure threshold that were assessed with visual analogue scale and algometer respectively. Results: Significant improvement in pain and pain pressure threshold was observed in both groups (P=0.0001) after the treatment. Also, the results showed a significant difference in measurements between two groups (P<0.05). Conclusion: Dry needling with passive stretch can be more effective on pain and pain pressure threshold than passive stretching alone in short term in participants with active myofascial trigger points.

Keywords : dry needling, myofascial pain syndrome, myofascial trigger point, stretching
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