
SYSTEMATIC REVIEW DRY NEEDLING IN SUBJECTS WITH MUSCULAR TRIGGER POINTS IN THE LOWER QUARTER: A SYSTEMATIC REVIEW

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ABSTRACT

Background: Trigger points, which have been defined as highly localized, hyperirritable locations in a palpable taut band of skeletal muscle fibers, have been identified with a variety of musculoskeletal conditions. The incidence of trigger point pain is high, with studies showing them as the primary source of pain in 30-85% of patients presenting in a primary care setting or pain clinic. Dry needling has emerged as a possible intervention for trigger points, but its effectiveness has not yet fully been determined.

Purpose: To assess and provide a summary on the current literature for the use of dry needling as an intervention for lower quarter trigger points in patients with various orthopedic conditions.

Study Design: Systematic review

Methods: CINAHL, NCBI-PubMed, PEDro, SPORTDiscus, Cochrane Library, and APTA's PTNow were searched to identify relevant randomized controlled trials. Six studies meeting the inclusion criteria were analyzed using the PEDro scale.

Results: Four of the studies assessed by the PEDro scale were deemed 'high' quality and two were 'fair' quality. Each of the six included studies reported statistically significant improvements with dry needling for the reduction of pain intensity in the short-term. Only one study reported a statistically significant improvement in short-term functional outcomes; however, there was no maintenance of improved function at long-term follow-up. Furthermore, none of the studies reported statistically significant changes regarding the effect of dry needling on quality of life, depression, range of motion, or strength.

Conclusion: A review of current literature suggests that dry needling is effective in reducing pain associated with lower quarter trigger points in the short-term. However, the findings suggest that dry needling does not have a positive effect on function, quality of life, depression, range of motion, or strength. Further high quality research with long-term follow-up investigating the effect of dry needling in comparison to and in conjunction with other interventions is needed to determine the optimal use of dry needling in treating patients with lower quarter trigger points.

Keywords: Dry needling, lower quarter, systematic review

Levels of Evidence: 1

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