
Title

Effectiveness of deep dry needling combined with stretching for the treatment of pain in patients with myofascial trigger points: A systematic review and meta-analysis

Abstract

Objective: The combination of dry needling and stretching has been proposed for the treatment of myofascial trigger points (MTPs), but it is not currently known whether the combination of both interventions would be of greater interest than the application of stretching alone. Thus, this systematic review aimed to compare the effectiveness of deep dry needling with stretching versus stretching alone on pain among patients with MTPs. Methods: The PubMed, Web of Science, Cochrane Library, and Scopus databases were searched to identify studies analysing the effect of deep dry needling in combination with stretching versus stretching alone for the treatment of pain. The Cochrane risk of bias 2 tool (RoB2) was used to assess the risk of bias, and the DerSimonian–Laird method was applied to estimate the pooled standard effect sizes (ESs) and their 95% confidence intervals (95% CIs). Results: Five randomized controlled trials were included in this systematic review, and their pooled ES for pain was -1.73 (95% CI: -3.06 ; -0.40). The RoB2 tool revealed that four studies had an unclear risk of bias, and one study had a high risk of bias. Conclusions: Adding deep dry needling to stretching for the treatment of MTP may be an effective approach for the treatment of pain in patients with MTPs. Further research is needed to clarify the ideal number of local twitch responses to perform during deep dry needling. © 2024 The Authors

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Cochrane Library; comparative effectiveness; confidence interval; dry needling; effect size; human; Medline; meta analysis; muscle stretching; muscle twitch; myofascial pain; pain intensity; randomized controlled trial (topic); Review; risk

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