Evidence for the Use of Ischemic Compression and Dry Needling in the Management of Trigger Points of the Upper Trapezius in Patients with Neck Pain: A Systematic Review.

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Abstract

The aim of this review was to describe the effects of ischemic compression and dry needling on trigger points in the upper trapezius muscle in patients with neck pain and compare these two interventions with other therapeutic interventions aiming to inactivate trigger points. Both PubMed and Web of Science were searched for randomized controlled trials using different key word combinations related to myofascial neck pain and therapeutic interventions. Four main outcome parameters were evaluated on short and medium term: pain, range of motion, functionality, and quality-of-life, including depression. Fifteen randomized controlled trials were included in this systematic review. There is moderate evidence for ischemic compression and strong evidence for dry needling to have a positive effect on pain intensity. This pain decrease is greater compared with active range of motion exercises (ischemic compression) and no or placebo intervention (ischemic compression and dry needling) but similar to other therapeutic approaches. There is moderate evidence that both ischemic compression and dry needling increase side-bending range of motion, with similar effects compared with lidocaine injection. There is weak evidence regarding its effects on functionality and quality-of-life. On the basis of this systematic review, ischemic compression and dry needling can both be recommended in the treatment of neck pain patients with trigger points in the upper trapezius muscle. Additional research with high-quality study designs are needed to develop more conclusive evidence.

PMID:

25768071

[PubMed - indexed for MEDLINE]