

Effects of Scapular Re-Positioning Interventions in Patients with Shoulder Impingement: A Literature Review Analysis

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ABSTRACT

Introduction: Shoulder Impingement Syndrome (SIS) occurs due to the compression of the rotator cuff tendon within the subacromial space, leading to pain and dysfunction. The biomechanics of the scapula and its stabilisation play a crucial role in maintaining the scapulohumeral rhythm. Therefore, strengthening and stabilising the scapula are essential for managing SIS effectively.

Aim: The review aims to explore the existing literature to check for the effects of scapular strengthening and stabilisation exercises on individuals with Shoulder Impingement Syndrome.

Methods: A comprehensive Literature search was conducted on Google scholar, Medline, Scopus and CINAHL using appropriate MeSH keyterms: "scapular re-positioning," "scapular muscle strengthening," "shoulder impingement," "subacromial impingement," and "supraspinatus tendinitis" This search yielded a total of 1042 articles after duplicates removal. Based on PICO eligibility criteria and after full text screening, 8 Randomised Control Trials published in English between 2014-2024 were ultimately selected for the review, focusing on scapular stabilisation and mobility in patients with shoulder impingement. The outcomes of

these studies emphasised mainly on Visual Analogue Scale (VAS), Shoulder ROM, Disabilities of the Arm, Shoulder and Hand (DASH) and scapular muscle strength. This review doesn't include a formal quality assessment of the studies, rather gives a broad overview of the literature.

Results: The findings indicate that interventions focusing on scapular positioning, including taping and stabilisation exercises, significantly reduce pain and improve shoulder function in patients with SIS.

Conclusion: Taping as an adjunct to Scapular stabilisation exercises leads to scapular repositioning with improved scapulo-humeral rhythm which alleviate pain, reduce disability and ultimately leads to an improvement in SIS.

Implications: Scapular stabilisation exercises can be incorporated into physiotherapy protocols to enhance scapular biomechanics and restore optimal scapulohumeral rhythm. Additionally, clinicians can consider integrating taping techniques for better pain relief and movement efficiency.

Keywords: Scapular strengthening, Scapular stabilisation exercises, Shoulder impingement, Subacromial impingement

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