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PHYT752

Module 5b

**PICO Question**

In overhead athletes ages 18-35 with subacromial impingement, does MWM of the glenohumeral joint or therapeutic exercise alone better improve functional outcomes and reduce pain?

**Key Points**

There are varying results concerning the added benefit associated with including manual therapy techniques for shoulder impingement.6,8,10 While some studies reported all of the groups included in their design saw benefits, others found significantly better outcomes for those specifically including manual therapy and joint mobilization. For example, studies showing the added benefit of joint mobilizations report significant decreases in pain compared to therapeutic exercise alone.2,6,10 Overall, it is important to determine the definitions of “manual therapy” and “therapeutic exercise” as studies can have different interpretations, making comparisons more difficult.3 A definition discrepancy could also be a reason for differing results seen among current research.

Although it is a relatively new concept in research, MWM has been shown to provide added benefit in treatment of shoulder and rotator cuff impingement.2,4,6,9 Previous studies investigating effects of MWM on ankle sprains and lateral epicondylitis have found added benefit using this technique.1,7 MWM is thought to improve results due to its effects on the extensibility of the posterior capsule and positioning of the humeral head. A tight capsule and poor positioning of the humeral head usually contribute to the impingement of tissues.1,2,4,6 MWM is indicated for a patient with painful shoulder AROM in flexion and/or abduction, which are common impairments associated with shoulder impingement.

MWM is to be performed by applying a posterior joint mobilization while the patient actively flexes or abducts their shoulder. The abduction motion is usually performed in the scapular plane (i.e. scaption).2,4,6,9 The patient should not report having any pain during the movements. Many of the studies performed the mobilization a total of 30-36 times in one treatment session (divided into 3 sets of 10/12 repetitions).1,2,4,6,9 Currently there is no specified time-table for implementation, although one case study found positive results for an overhead athlete after 5 sessions of MWM.2 The technique is likely to be used in combination with other treatment techniques including therapeutic exercises, kinesiotaping, soft tissue mobilization, etc. It is also important to be aware of age of patient and whether the patient’s age is a factor in restricting their range of motion.5

The idea behind including MWM in treatment for subacromial impingement comes from its intention to increase the amount of subacromial space. MWM is proposed to affect the capsule and surrounding structures to provide more room for the rotator cuff tendons and bursa.1,2,4,6 More research is definitely needed in this arena to confirm or refute whether MWM provides added benefit. Positive results have been shown with the use of general glenohumeral joint mobilizations, but very few studies specifically investigate MWM.

**References**

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