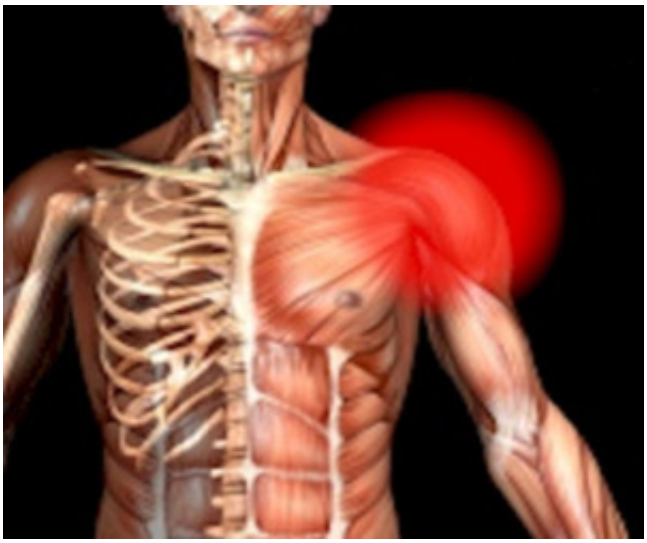
How can I create more mobility in my stiff shoulder?



A stiff shoulder, or the so-called “frozen shoulder”, is a disorder characterized by progressive pain and loss of mobility of the shoulder. The annual incidences are 3 to 5% in the general population and even up to 40% in diabetics. It mainly affects people between the ages of 40-60 years, with women more commonly affected than men and lasts approximately 12 to 42 months in total.

Possible interventions for this disease are corticosteroid injections, education, physical therapy, joint mobilizations, manipulations and stretching exercises to reduce pain or increase mobility.

Mobilization techniques are indeed commonly used to increase the movement in the shoulder capsule and stretch the tightened tissues. It is still a matter of debate what the optimal direction of force and movement application should be to restore joint mobility in these patients. Therefore, it is of importance to compare the treatment effects of different mobilization techniques.

We systematically analyzed 12 internationally published studies that included 7 different types of mobilization techniques. Mobilization techniques can include both angular and translational mobilizations, which refers to the direction of mobilization. In addition, several concepts of mobilization techniques exist, such as the Mulligan’s technique, which combines sustained manual application of gliding force to the joint with a simultaneous active movement of the joint by the patient. Or the Maitland’s technique, which is based on the 5- grade classification system of Maitland and describes the amplitude of the rhythmic mobilization in the specified range of movement. Mobilizations can be performed beyond or within the pain threshold. The so-called high intensity mobilizations include active exercises up to and beyond the pain threshold. Deep friction massage, also known as the CYRIAX approach, is often used prior to and in conjunction with mobilization techniques to make scar tissue more mobile in inflammatory conditions.

Four out of eight studies reported reduced pain following a mobilization program. In addition, eight

out of ten studies reported a beneficial effect of mobilization techniques on range of motion. Angular mobilization (N=2), CYRIAX approach (N=1) and Maitland's technique (N=6) showed improvement in pain score and range of motion. With respect to translational mobilizations (N=1), posterior glides are preferred to restore external rotation. Spine mobilizations combined with glenohumeral stretching and both angular and translational mobilization (N=1) had a superior effect on active range of motion. High intensity mobilization (N=1) showed less improvement in Constant Murley Score (describing pain and range of motion after treatment) compared to a neglect group. Finally, positive long-term effects of Mulligan's technique (N=1) were found on both pain and range of motion.

In conclusion, the appropriate treatment for each individual with frozen shoulder may be dependent on the course and duration of symptoms. E.g. it is well recognized that no additional pain should be provoked in the early (painful) stages of frozen shoulder. Overall, mobilization techniques have beneficial effects in patients with a frozen shoulder. Particularly Maitland's technique and spine mobilizations combined with glenohumeral stretching and both angular and translational mobilization seem recommended at the moment. Due to the preliminary evidence for many mobilization techniques, more studies are needed on assessing the effect of angular, translational and high intensity mobilization techniques, CYRIAX approach and Mulligan's technique on pain and range of motion.

Publication

Efficacy of Different Types of Mobilization Techniques in Patients With Primary Adhesive Capsulitis of the Shoulder: A Systematic Review.
Noten S, Meeus M, Stassijns G, Van Glabbeek F, Verborgt O, Struyf F
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