

The Effect of Joint Mobilization as a Component of Comprehensive Treatment for Primary Shoulder Impingement Syndrome

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Setting the scene:

To study The Effect of Joint Mobilization as a Component of Comprehensive Treatment for Primary Shoulder Impingement Syndrome

What did they do?

Eight men and six women with primary shoulder impingement syndrome (superolateral shoulder pain, decreased active humeral elevation, limited overhead function). Following random assignment to experimental ($N = 7$) and control groups ($N = 7$), three blinded evaluators tested 24-hour pain (visual analog scale), pain with subacromial compression test (visual analog scale), active range of motion (goniometry), and function (reaching forward, behind the head, and across the body in an overhead position) before and after nine treatments. Treatment was concluded with 10 minutes of soft tissue mobilization. Prior to the soft tissue treatment, the experimental group received a series of mobilization techniques to the subacromial and glenohumeral joints. Depending on the direction of restriction in capsular extensibility of each subject, four separate techniques were employed, including inferior glide, posterior glide, anterior glide, and long axis traction. The principal investigator applied oscillatory pressure of two to three oscillations per second. The grade [I-IV] of stretch was largely dependent upon the patient's response and end-feel testing. For situations where pain or muscle spasm preceded a sensation of resistance, a grade I or II stretch was applied. As the end-feel became more resistant and less painful, grade III and IV pressure was applied. Each indicated technique was administered two to four times (30 seconds each). As a result, the experimental group received a maximum of 15 minutes additional treatment compared with the control group. Post treatment measurements were taken 1-3 days following the last treatment.

Takeaway message:

This study provides preliminary evidence that the use of joint mobilization relieves pain over a 24 hour period and with subacromial compression testing but may not be necessary to improve mobility and function in the treatment of primary shoulder impingement syndrome when combined with heat, active range of motion, physiologic stretching, muscle strengthening exercises, soft tissue mobilization, and patient education.