Adhesive capsulitis of the shoulder: Diagnostic value of active and passive range of motion with volume of the gleno-humeral capsule as reference

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Aim.– The aim was the study of the value of active global (AG) and passive gleno-humeral (PGH) range of motion (ROM) for diagnosing adhesive capsulitis of the shoulder.

Patients and methods.– Candidates to arthrodistension for adhesive capsulitis of the shoulder were included. Inclusion criteria were: limitation of AG (abduction or flexion < 180°) and PGH (abduction or flexion < 90°, or 25% reduction at less of lateral rotation as compared with the opposite shoulder) ROM, and normal articular space on X-ray. Reference criterion for adhesive capsulitis was a gleno-humeral capsule volume < 12 mL as assessed during the procedure of arthrodistension.

Results.– Thirty-one of the 38 included patients satisfied to the reference criterion of adhesive capsulitis. Positive predictive value (PPV) of AG and PGH ROM was therefore 78%. PGH abduction only, was correlated with the volume of the gleno-humeral capsule: \( r = 0.33, P = 0.043 \). Using a threshold of 80° for PGH abduction the PPV was 84%; for a threshold of 60°, 89%, and for a threshold of 40°, 100%.

Discussion.– Limitation of AG and PGH ROM has a high PPV (78–100%) for the diagnosis of adhesive capsulitis of the shoulder.

Comparison between supervised structured exercise program and home based exercise program in idiopathic adhesive capsulitis

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Keywords: Idiopathic adhesive capsulitis; Supervised structured exercise program; Home-based exercise program

Introduction.– Exercises are important for management of Adhesive capsulitis. Attending daily exercises in rehabilitation setup results in days lost at work and expenses on travelling. Alternate is a home-based Exercise plan. In this study, we compared effectiveness of supervised structure exercise program (SSEP) with home based exercise program (HBEP) in treatment of idiopathic adhesive capsulitis (IAC).

Material and methods.– It was a randomized control trial conducted at Armed Forces Institute of Rehabilitation Medicine Rawalpindi. Patients in phase-2 of IAC were randomly distributed in two groups “A” undergoing SSEP and “B” undergoing HBEP by simple lottery method. Patients with arthrythiasms, cardiovascular diseases and uncontrolled diabetes mellitus were excluded from study. Shoulder pain and disability index (SPADI) and range of motion (ROM) was recorded at presentation and after 3 weeks of exercises. SPSS 17 was used for analysing data.

Results.– In each group 42 patients were enrolled. Females were affected more than males in both groups. There was significant improvement in SPADI and ROM at shoulder joint in both groups (\( P<0.05 \)) after 3 weeks.

Discussion.– Both SSEP and HBEP can significantly reduce disability with idiopathic adhesive capsulitis. Patient of IAC with no contraindications can adopt HBEP with equal efficacy.

Closed-chain exercise effectiveness for preventing shoulder disorders in industrial workers

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Keywords: Shoulder; Musculoskeletal disorders; Subacromial impingement; Closed-chain exercise

Introduction.– Shoulder work-related musculoskeletal disorders represent a major occupational health problem. The most common shoulder disorder described in the literature is the subacromial impingement syndrome. This pathomechanism is generally associated with an abnormal superior humeral head migration during arm elevation. The aim of this study is to investigate the effect of a specific closed-chain humeral head centering exercise on shoulder pain and function at workplace.

Methods.– Eleven subjects with impingement symptoms have performed 5 humeral head centering sessions with the help of a specific device (ScapuleTM, Euryphysis). Two parameters were controlled before and after the training program: – Shoulder Pain And Disability Index (SPADI);

– range of motion during Yocum impingement test by means of an electronic inclinometer (T-Sens, TEA).