TREATMENT & MANAGEMENT OF ADHESIVE CAPSULITIS OF SHOULDER JOINT BY SUPERVISED PHYSIOTHERAPY & INTRA-ARTICULAR CORTICOSTEROIDS OR A COMBINATION OF BOTH – A COMPARATIVE STUDY

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**ABSTRACT**

**Background:** Adhesive capsulitis is a term, which describes a combination of shoulder pain and stiffness that causes sleep disturbance and marked disability, and which runs a prolonged course. Painful stiffening of the shoulder was given the term 'adhesive capsulitis' by Neviaser in 1945. Codman used the term 'frozen shoulder' to describe a painful shoulder condition of insidious onset with stiffness and difficulty sleeping on the affected side.

**Objectives:** To compare the efficacy of single intra-articular corticosteroid injection, a supervised physiotherapy program, a combination of the two, and placebo in the treatment of adhesive capsulitis of the shoulder.

**Method:** The main aim of this research was to evaluate the effect of an exercise class compared to multimodal physiotherapy and a home exercise program in patients, who are suffering from adhesive capsulitis. To identify that clinical score was main objective of this study and were effective at identifying change in the different treatment groups and to provide recommendations for the physiotherapeutic management of adhesive capsulitis. Ninety three subjects with adhesive capsulitis of 6 month duration were randomized to 1 of 4 treatment groups: group 1, corticosteroid injection (triamcinolone hexacetonide 40 mg) performed under fluoroscopic guidance followed by 12 seasons of supervised physiotherapy; group 2, corticosteroid injection alone (placebo group). All subjects were taught a simple home exercise program. Subjects were reassessed after 3 weeks, 6 week, 3 month, 6 months. The primary outcome measure was improvement in the shoulder pain and disability index (SPADI) score.

**Results:** Results from the research indicate that during this period, an effective way was Multimodal Physiotherapy and Home Exercises combined together. At 6 weeks, the total SPADI scores had improved significantly more in groups 1 and 2 compared with groups, 3 and 4 (P = 0.0004). The total range of active and passive motion increased in all groups, with
group 1 having significantly greater improvement than the other 3 groups. At 3 months, groups 1 and 2 still showed significantly greater improvement in SPADI scores than group 4. There was no difference between groups 3 and 4 at any of the follow up assessments except for greater improvement in the range of shoulder flexion in group 3 at 3 months. At months, all groups had improved to a similar degree with respect to all outcome measures.

**Interpretation and Conclusion:** A single intra-articular injection of corticosteroid administered under fluoroscopy combined with a simple home exercise program is effective in improving shoulder pain and disability in patients with adhesive capsulitis. Adding supervised physiotherapy provides faster improvement in shoulder range of motion. When used alone, supervised physiotherapy is of limited efficacy in the management of adhesive capsulitis. The authors of study scoring trials concluded that steroid injections had a positive effect in their studies. They found that multiple injections reduced pain and/or improved movement (external rotation). This study provides an original contribution to knowledge in adhesive capsulitis and has important implications for enhancing clinical practice. The findings suggest that a hospital based exercise class produced a rapid recovery with a minimum number of visits to the hospital. Physiotherapy could also be considered to optimize speed of recovery of adhesive capsulitis. Finally, physiotherapists require training in the clinical diagnostic accuracy of adhesive capsulitis. The need for further research in this area is emphasized.

**KEYWORDS:** Adhesive Capsulitis, Shoulder Joint & Physiotherapy.

**REFERENCES**


