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**EFFECTIVENESS OF ULTRASOUND THERAPY IN COMBINATION WITH MANUAL THERAPY AND SHOULDER EXERCISES FOR SUB ACROMIAL IMPINGEMENT SYNDROME (PRELIMINARY STUDY)**

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Sub acromial impingement syndrome (SIS) is a painful impingement of the supraspinatus tendon and sub acromial bursa between the head of the humerus and coracoacromial arch which is a frequent cause of shoulder pain. Ultrasound is a commonly used electrotherapeutic modality along with other therapeutic methods for impingement as well as other forms of tendinitis and muscle injury. The aim of this study was to find out whether ultrasound therapy has an added effect when combined with manual therapy and exercises in the physiotherapy management of patients with SIS to reduce pain, increase range of motion and to reduce shoulder disability.

Patients in the acute and sub acute stages of sub acromial impingement syndrome were recruited to the study. They were divided into two groups. Both the groups received manual therapy and shoulder exercises and the intervention group received ultrasound therapy in addition to the other treatment methods. Patients were treated for five days a week for three consecutive weeks and the outcome measures were Visual Analogue Scale (VAS), Shoulder Disability Index and Range of motion assessment to assess pain, shoulder disability and shoulder range of motion respectively.

13 participants from the control group and 13 participants from the intervention group completed the study. Both the groups showed significant improvement after three weeks of treatment.

Intergroup comparisons for pain, shoulder disability and range of motion showed no significant difference during or after completion of three weeks of treatment. Hence, Ultrasound therapy proved to have no additional effect when combined with manual therapy and shoulder exercises in treating patients with sub acromial impingement syndrome.