

Case Report

Effect of Physiotherapy Treatment on Adhesive Capsulitis: A Case Study

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ABSTRACT

This is the case study of evaluation and treatment of patient who has experienced chronic shoulder pain in her left shoulder. The purpose of this case study is to describe the physiotherapy rehabilitation for adhesive capsulitis patient.

CASE DESCRIPTION

A case study of 59 years old lady was experiencing shoulder pain with restricted range of motion (movement) in her left shoulder (right-handed). The patients had a past medical history of thyroid. There are often a number of problems that have to be dealt with to get a good result.

Subjective Assessment

Pain on the anterior and posterior part of the shoulder joint with referral pain to the mid half of the arm. The pain is extreme at night and becomes more severe with use of upper extremity during day time. Movements which cause more pain are mainly external rotation and overhead movement. Also there was pain in the upper back.

Aggravating Factors: External rotation of shoulder, wearing a bra, overhead activity of hand.

Easing Factors: No movement of left hand or Rest.

Diurnal Variations: Patient felt more pain in the evening and night, which affects her sleep.

History: There was gradual onset of pain in shoulder over last 9 months, which worsen in last 2 months; there was no history of trauma to the left shoulder joint.

Social History: Housewife manages her household daily activities.

Past Medical History: She was a patient of hyperthyroidism and taking medicine since last 4 years. There was no history Rheumatoid Arthritis, high BP and diabetes in her family.

Objective Observations: Patient had poor posture. Her left shoulder and arm look wasted in comparison to right shoulder. There was swelling around her left shoulder, slouched flexed thoracic spine.

Left Shoulder Assessment

Active ROM: As her left shoulder joint was stiff so its movement increases her pain. Her left shoulder joint motion was limited due to pain. ROM of external rotation, flexion, abduction and scaption were limited to 20-25, 50-60, 30-40 and 40-50 degrees of her left shoulder respectively.

Passive ROM: Passive range of motion of external rotation, flexion, abduction and scaption were measured 30-35, 60-70, 40-50 and 50-60 degrees of her left shoulder respectively. Passive range of motion was restricted due to soft tissue tightness and pain at the terminal range of

left shoulder joint.

Additional Problems: Elevation of the scapula noted on left side.

Tests: Hallmark sign test found positive (i.e. global loss of active and passive range of motion of left shoulder).

- ROM of left shoulder joint was Restricted. Most restricted movement was External rotation than abduction & than flexion movement.
- Muscle Power was assessed through Manual Muscle Testing, Muscle Power of left shoulder was 4- on MMT.

Palpation: Pain is elicited by applying direct pressure on coracoid process. Many palpable trigger points were noted in the left upper trapezius at insertion of elevator scapulae at scapular region and musculo-tendinous junction of the subscapularis.

Problems:

- Shooting pain in left shoulder that radiates down
- Pain aggravates with activity
- Restricted left shoulder range of motion in all planes
- Activity of daily living becomes severely restricted

Treatment Plan

Physiotherapy Session from 1st to 5th Day:

- Hot pack for 14-20 minutes to relax the muscles of the shoulder complex
- Ultrasound therapy Intensity- 0.8 W/cm^2 , Frequency-1 MHz, Duration- 5 to 6 minutes to break the adhesions and to decrease pain
- Capsular stretch of Shoulder joint (5-6 times)
- Isometric Exercises
- Shoulder pulley exercise



-Finger Ladder Exercise
(Image Courtesy: researchgate.net)



- Shoulder wheel exercise for 10 minutes
- Self assisted shoulder ROM exercises
(Image Courtesy: researchgate.net)

Physiotherapy Session from 6st to 10th Day:

Exercises were same while number of repetitions was increased.

- Capsular stretch of Shoulder joint (10-12 times)
- Glenohumeral caudal glides (2sets, 10 rep.)
- GH posterior glides (2sets, 10 reps.)



- Long Axis Traction of GH Joint
- Resisted Exercise in available range was added (7 reps.)
- Cod-man's Exercise
(Image Courtesy: activecarephysicaltherapy.com)



Physiotherapy Session from 11st to 15th Day:

Exercise were kept same and the number of repetitions was increased.

- Hold-Relax Technique (5reps.)
- Resisted exercises were added within the available range (12 reps.)

(Image Courtesy: researchgate.net)

Home Regime:

- Hot water fermentation for 15-20 minutes
- Cod-man's Exercise
- Active ROM Exercises
- Self assisted shoulder ROM Exercises

CONCLUSION

This case study concluded that in case of adhesive Capsulitis physiotherapy gives beneficiary result. Different therapeutic techniques like hot water fermentation, ultrasound therapy, stretching (muscles and capsular), strengthening exercises of weak muscles around shoulder girdle, Hold-Relax technique, Joint mobilization, Cod-man's exercise and home exercises regime helps in decreasing pain and stiffness of joints in frozen shoulder, increasing joint ROM.

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