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## Shoulder Tendinitis Rehabilitation

The physical therapy rehabilitation program for Shoulder Tendinitis is similar to that of other non-surgical pathologies. The exception is an addition of one phase early in rehabilitation period. During Phase I, pain modulation, inflammatory control, increased upper extremity motion and/or flexibility, and improved shoulder girdle strength are the primary goals. The goals of Phase II-IV consist of increased strength and end range flexibility as well as a functional return to prior levels of activity.

### Phase I

1. Application of ice cup/bag three to four times daily for 10-20 minutes (while using ice cup, firm pressure with circular motions should be used).
2. Pain and inflammation may also be controlled through the use of nonsteroidal anti-inflammatory drug. Modalities such as the high voltage electrical stimulation, ultrasound, phonophoresis or iontophoresis may be beneficial at this time.
3. Functional range of motion is returned if limited. This can be accomplished through Codman's pendulum, wall walking, wand and pulley exercises. Inferior glide of shoulder capsule is restored through the long arm pull exercise, except in unstable patients. Joint mobilization in various degrees of elevation can also help to restore inferior glide.
4. Eccentric resistive tubing exercises are utilized for shoulder girdle strengthening. Initially the eccentric loading is done in a very slow controlled manner with light weight tubing. As the patient becomes less symptomatic, the speed of the eccentric contraction is increased and more resistive tubing is used.
5. Cross-friction massage is initiated early in the rehabilitation program for the purpose of decreasing inflammation and scar tissue formation of the involved tendon. Scarring of the tendon may follow a single overstrain or repeated overuse.

o Wait until remodeling phase of rehab.

Cross friction massage is commonly performed to the supraspinatus, infraspinatus, and biceps tendon, proper positioning is needed for effectiveness as described below.

1. Supraspinatus - adduction and medial rotation with forearm behind back.

2. Infraspinatus - prone on elbow with slight lateral rotation.
3. Bicipital - external rotation with arm at side and pronation of forearm

(elbow bent at 90 degrees).

6. Postural awareness is the final goal of Phase I. This is important for the proper biomechanical function of the shoulder girdle. Exercises including shoulder shrugs/depression, shoulder retraction, shoulder circles or clock may be reviewed with patient to reinforce postural awareness. Prone or standing Sahrman exercises are helpful in restoring postural balance.

### **Phase II**

1. Ice, control of pain/inflammation through NSAIDs and modalities if needed, cross friction massage and postural awareness are all continued through Phase II.
2. A shoulder girdle stretching program is initiated for upper-extremity flexibility. The long arm pull stretch is emphasized for inferior glide of the shoulder capsule reducing strain/pressure on the rotator cuff. (Stretching exercises are to be continued two times daily prior to strengthening).
3. Eccentric tubing exercises are progressed to concentric work with increased repetitions/resistance as tolerated. Hughston exercises are added for focus on specific rotator cuff musculature.

### **Phase III**

1. Continue with upper-extremity flexibility exercises including door stretch, towel stretch, across the chest stretch, and long arm pull. Do not stretch beyond physiological motion of the joint.
2. Strengthening program now incorporates Hughston exercises and dumbbell work, concentration on rotator cuff and proximal stabilization strengthening. Start to bias strengthening to functional positions.
3. Ice is continued twice daily after each exercise session. Physical therapy modalities may be continued dependent upon patient progress and therapist's discretion.

### **Phase IV**

1. The focus of Phase IV rehabilitation for shoulder tendinitis is functional return of the patient to prior activities. Strength must be restored through full ROM and into the end range of motion, minimizing functions.

2. Implementation of a sport specific functional progression is important at this time. The patient will need to complete the functional progression (ie. throwing progression) prior to return to full sports competition or previous activity level.