



## Rehabilitation Protocol

### Biceps Tenodesis Without Rotator Cuff Repair

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Post-op appointments: 1 WEEK, 5 WEEKS, 10 WEEKS, 16 WEEKS

#### PHASE I (WEEKS 0-4)

##### Immobilization:

- **4 WEEKS:** Sling should be worn continuously and should only be taken off for exercises and showering.
- Wean out of sling on post operative week 4.

##### Rehabilitation Goals:

- Reduce pain and swelling in the post-surgical shoulder
- Regain full PROM and begin AAROM
- Activation of the stabilizing muscles of the gleno-humeral (GH) and scapula-thoracic joints.

##### Precautions:

- Avoid activities that may impinge on the denuded bone of the acromion
- Use sling as needed for comfort after 4 weeks.
- Relative rest to reduce inflammation
- Can use arm elbow at side 1-2lbs

##### Therapeutic Exercise:

- Begin post operative passive stretches (forward flexion/external rotation) following **1 WEEK** post operative visit.
- Codman's, pulleys, cane (options per patient basis)
- Gentle shoulder mobilization
- Hand gripping
- Elbow PROM, forearm, and wrist AROM
- Cervical Spine and scapular AROM
- Postural exercises

##### Cardiovascular Fitness:

- Walking, stationary bike
- Avoid running and jumping due to the forces that can occur at landing

### **Progression to Phase II**

- The patient can progress to phase II when they have achieved full PROM and normal (5/5) strength for internal rotation/external rotation with arm at side.

## **PHASE II (WEEKS 5-9)**

### **Rehabilitation Goals:**

- Controlled restoration of AROM
- Strengthen shoulder and scapular stabilizers in protected position (0-45 abduction)
- Begin proprioceptive and dynamic neuromuscular control retraining
- Correct postural dysfunctions

### **Precautions:**

- Avoid repetitive overhead activities
- Post-rehabilitation soreness should alleviate within 12 hours of the activities.

### **Therapeutic Exercise:**

- AROM in all cardinal planes-assessing scapular rhythm
- Biceps strengthening can start at 8 weeks.
- Gentle shoulder mobilizations as needed
- Rotator cuff strength progression
- Scapular strengthening and dynamic neuromuscular control
- Cervical spine and scapular AROM
- Postural exercises
- Core strengthening

### **Cardiovascular Fitness:**

- Walking, stationary bike, Stairmaster
- Jogging/running can begin at 6-8 weeks

### **Progression to Phase III**

- The patient can progress to Phase III when they have achieved full AROM at least 90% of uninjured shoulder and can demonstrate activation of rotator cuff muscles in 0-45 degrees of abduction.

## **PHASE III (WEEKS 10-16) STRENGTHENING**

### **Rehabilitation Goals:**

- Normal 5/5 rotator cuff strength at 90 abduction and with supraspinatus testing
- Full multiplanar AROM
- Advance proprioceptive and dynamic neuromuscular control retraining
- Correct postural dysfunctions with work and sport specific tasks

**Precautions:**

- Post-rehabilitation soreness should alleviate within 12 hours of the activities

**Therapeutic Exercise:**

- Multiplane AROM focusing on scapular rhythm
- Gentle shoulder mobilizations as needed
- Rotator cuff strengthening at 90 degrees abduction, progressing to dynamic positions.
- Scapular strengthening and dynamic neuromuscular control in overhead positions.
- Cervical spine and scapular AROM
- Postural exercises
- Core Strengthening
- (Athletes) Begin education in sport specific biomechanics with very initial program for throwing, swimming, over head racquet sports.

**Cardiovascular Fitness:**

- Walking, stationary bike, Stairmaster, running
- Avoid swimming until normal 5/5 rotator cuff strength at 90 degrees abduction and negative impingement signs.

**Progression to Phase IV**

- The patient can progress to phase IV when they have achieved full multi-plane AROM (equal to uninvolved side) and normal 5/5 strength for internal rotation/ external rotation with the shoulder at 90 degrees abduction and full supraspinatus strength.
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**PHASE IV (MONTHS 4+) HOME EXERCISE PROGRAM**

**Rehabilitation Goals:**

- Normal rotator cuff strength at 90 degrees abduction and sports specific/dynamic strengthening
- Advance proprioceptive and dynamic neuromuscular control retraining
- Correct postural dysfunctions with work and sport specific tasks
- Develop strength and control for movements required for work or sport.

**Precautions**

- Post-rehabilitation soreness should alleviate within 12 hours of the activities

**Therapeutic Exercise:**

- Multiplane AROM with gradual increase in velocity of movement.
- Shoulder mobilization as needed
- Rotator cuff functional strengthening and sport/work specific progression (eccentric strengthening, endurance and velocity specific exercises)
- Scapular strengthening and dynamic neuromuscular control in over head positions and work/sport specific positions.
- Core and lower body strengthening
- Throwing program, swimming program, overhead specific

**Cardiovascular Fitness:**

- Design to use work or sport specific energy systems

**Progression to Discharge**

- The patient may return to sport after receiving clearance from Dr. Norberg, Ryan Nelson PA-C, ATC and Therapy Staff. This will be based on meeting therapy goals and safe return to work/sport.