



BRANDON  
PLANT CITY  
TAMPA  
APOLLO BEACH

Dx:  Right  Left      **BICEPS TENODESIS**

Date of Surgery: \_\_\_\_\_ Patient Name: \_\_\_\_\_

PT/OT: Please evaluate and treat. Follow attached protocol. 2-3 x per week x 6 weeks.

Signature/Date: \_\_\_\_\_

Phase I – Passive Range of Motion Phase (starts after first post-op visit)

**Goals:**

- Minimize shoulder pain and inflammatory response
- Achieve gradual restoration of passive range of motion (PROM)
- Enhance/ensure adequate scapular function

**Precautions/Patient Education:**

- No active range of motion (AROM) of the elbow
- No excessive external rotation range of motion (ROM) / stretching.
- Use of a sling to minimize activity of biceps
- No lifting of objects with operative shoulder
- Keep incisions clean and dry
- No massage to the proximal biceps tendon / tenodesis site

**Activity:**

- Shoulder pendulums
- PROM elbow flexion/extension and forearm supination/pronation
- AROM wrist/hand
- Begin shoulder PROM all planes to tolerance /do not force any painful motion
- Scapular retractions
- Sleep with sling as needed supporting operative shoulder, place a towel under the elbow to prevent shoulder hyperextension
- Frequent cryotherapy for pain and inflammation
- May return to computer based work

**Milestones to progress to phase II:**

- Appropriate healing of the surgical incision
- Full PROM of shoulder and elbow
- Completion of phase I activities without pain or difficulty

## Phase II – Active Range of Motion Phase (starts post op week 4)

### **Goals:**

- Minimize shoulder pain and inflammatory response
- Achieve gradual restoration of AROM
- Begin light waist level functional activities
- Wean out of sling by the end of the 3rd postoperative week
- Return to light computer work

### **Precautions:**

- No lifting with affected upper extremity
- No massage to the proximal biceps tendon / tenodesis site

### **Activity:**

- Begin gentle scar massage
- Progress shoulder PROM to active assisted range of motion (AAROM) and AROM all planes to tolerance
- Active elbow flexion/extension and forearm supination/pronation (No resistance)
- Glenohumeral, scapulothoracic, and trunk joint mobilizations as indicated.
- Begin incorporating posterior capsular stretching as indicated
- Cross body adduction stretch
- Side lying internal rotation stretch (sleeper stretch)
- Continued Cryotherapy for pain and inflammation

### **Milestones to progress to phase III:**

- Restore full AROM of shoulder and elbow
- Appropriate scapular posture at rest and dynamic scapular control with ROM and functional activities
- Completion of phase II activities without pain or difficulty

## Phase III - Strengthening Phase (starts post op week 6-8)

### **Goals:**

- Normalize strength, endurance, neuromuscular control
- Return to chest level full functional activities

### **Precautions:**

- Do not perform strengthening or functional activities in a given plane until the patient has near full ROM and strength in that plane of movement
- Patient education regarding a gradual increase to shoulder activities

### **Activity:**

- Continue A/PROM of shoulder and elbow as needed/indicated
- Initiate biceps curls with light resistance, progress as tolerated
- Initiate resisted supination/pronation
- Begin rhythmic stabilization drills
- External rotation (ER) / Internal Rotation (IR) in the scapular plane
- Flexion/extension and abduction/adduction at various angles of elevation

- Initiate balanced strengthening program
  - o Initially in low dynamic positions
  - o Gain muscular endurance with high repetition of 30-50, low resistance 1-3 lbs
  - o Exercises should be progressive in terms of muscle demand / intensity, shoulder elevation, and stress on the anterior joint capsule
  - o Nearly full elevation in the scapula plane should be achieved before beginning elevation in other planes
  - o All activities should be pain free and without compensatory/substitution patterns
  - o Exercises should consist of both open and closed chain activities
  - o No heavy lifting should be performed at this time
    - Initiate full can scapular plane raises with good mechanics
    - Initiate ER strengthening using exercise bands at 30° of abduction
    - Initiate sidelying ER with towel roll
    - Initiate manual resistance ER supine in scapular plane (light resistance)
    - Initiate prone rowing at 30/45/90 degrees of abduction to neutral arm position
    - Begin subscapularis strengthening to focus on both upper and lower segments
      - Push up plus (wall, counter, knees on the floor, floor)
      - Cross body diagonals with resistive tubing
      - IR resistive band (0, 45, 90 degrees of abduction)
      - Forward punch
- Continued cryotherapy for pain and inflammation as needed

#### **Milestones to progress to phase IV:**

- Appropriate rotator cuff and scapular muscular performance for chest level activities
- Completion of phase III activities without pain or difficulty

#### Phase IV – Advanced Strengthening Phase (starts post op week 10)

#### **Goals:**

- Continue stretching and PROM as needed/indicated
- Maintain full non-painful AROM
- Return to full strenuous work activities
- Return to full recreational activities

#### **Precautions:**

- Avoid excessive anterior capsule stress
- With weight lifting, avoid military press and wide grip bench press.

#### **Activity:**

- Continue all exercises listed above and progress isotonic strengthening if patient demonstrates no compensatory strategies, is not painful, and has no residual soreness
- Strengthening overhead if ROM and strength below 90 degree elevation is good
- Continue shoulder stretching and strengthening at least four times per week
- Progressive return to upper extremity weight lifting program emphasizing the larger, primary upper extremity muscles (deltoid, latissimus dorsi, pectoralis major)
  - o Start with light weight and high repetitions (15-25)
- May initiate pre injury level activities/ vigorous sports if appropriate / cleared by MD

**Milestones to return to overhead work and sport activities:**

- Clearance from MD
- No complaints of pain
- Adequate ROM, strength and endurance of rotator cuff and scapular musculature for task completion
- Compliance with continued home exercise program