

Hythem Shadid, MD Nolan S. Horner, MD Jonathan Wang, MD Matthew Diamond, MD Mark Cavalenes, MD Juraj Zahanatsky, MD

# **Biceps Tenodesis**

# Discharge Instructions

#### Comfort

- Discomfort increases 1-2 days after surgery due to the nerve block wearing off. This can be helped by oral pain medication. It is safe and normal.
- Cold therapy This will greatly reduce pain and will help with swelling for the first three days.
  - o You may use it 20 minutes on, 20 minutes off, as often as you wish.
  - Always keep a cloth barrier, such as a towel, between the cold and your skin.

### Medication

- For anticoagulation you MUST take one 81mg aspirin daily for two weeks to help prevent blood clots.
   This is the only mandatory medication.
- o For **nausea** Zofran (ondansetron) as needed.
- o For **constipation** over the counter remedies such as Colace or Miralax as needed. Both the anesthesia and the pain medication can cause constipation.
- o For pain A narcotic pain medication will be prescribed for you if it is deemed safe with your history and allergies. Try to manage your pain with ice, ibuprofen, and Tylenol and use the narcotic sparingly. Some patients find they do not need the narcotic at all. Common side effects such constipation, nausea and cognitive impairment may occur. Tylenol and ibuprofen can be used as step-down medications and are recommended as soon as possible. It is very common to use the pain medication at night to help sleep better or around the time of therapy so you can participate more comfortably.

# Activity

- Do not twist your wrist and forearm (ie, opening a jar, turning a doorknob). These motions may injure your biceps tendon.
- Please keep the shoulder immobilized in the sling at all times until otherwise directed. You can expect to need the sling for at least 4 weeks.
  - Wear the sling while sleeping.
  - o You may find sleeping in a recliner to be more comfortable for the first month.
- You may remove the sling several times per day to perform range of motion with your elbow and wrist to avoid stiffness.
  - Keep your elbow close to your body as you flex and extend it.
  - o Do not lift your arm in front of you or away from your side.
- Periodic standing and walking is encouraged to decrease the risk of blood clots.
  - If seated, perform ankle pumps and circles to promote lower extremity blood flow.
- Physical therapy usually begins within a few days after surgery.
  - o Please call your insurance company for a list of facilities in your area and choose one that is convenient.
  - o Once you have chosen a location, please call our office with their fax number and we will fax your referral.
- Driving At a minimum, no driving until you have stopped taking the narcotic. Please bear in mind we want you to be safe and comfortable when you return to driving this is a sliding scale depending on your progress.

#### Wound Care

- Your incisions are covered by several absorbent pads secured with foam tape. Please leave this in place until
  your first post-op visit.
  - The bandages were applied under sterile conditions in the OR, and we want to avoid bacteria near the incision.
- No showering until after your first post-op visit.

## Diet

• You may eat anything you like, but it's advisable to choose light, easily digestible foods and to drink plenty of water the day after surgery. Some people experience nausea as a temporary reaction to anesthesia.

## Call your physician if:

- You develop a temperature over 100.3 degrees.
- You notice any drainage of the incisions 5 days or later after surgery.
- The shoulder becomes hot to the touch, red, intolerably painful, or swells suddenly. (Note some warmth, pain, and swelling are normal.)
- You have persistent pain and / or swelling in your calf.
- You have any questions or concerns. We are happy to talk to you at any time! If it is after hours, our answering service will page the PA on call and he or she will get in touch with you.

## Recovery milestones:

PT will be 3x per week, starting immediately after your surgery. Once you begin PT, you must do the exercises daily.

### Overview:

- Week 4 Discontinue sling day and night
- Week 10 Full ROM is restored
- Week 14 Restricted motion sport activity (half golf swing, light swimming)
- Week 20 Return to full sport

# Physical Therapy Protocol

The following instructions are intended for your physical therapist and should be brought to your first physical therapy visit, which should occur 1 month after the day of surgery.

## PHASE I – Week 0-6

Goals: Protect the repair, promote dynamic stabilization, diminish pain and inflammation, prevent negative effects of immobilization

### Week 0-2:

- Sling day and night for 4 weeks
- No isolated biceps contraction

## Exercises:

- NO active external rotation, extension, or abduction
- Elbow and hand ROM
- Hand gripping exercises
- Passive and gentle active assisted ROM:
  - Flexion to 60 (week 1); 70 (week 2)
  - o Elevation in scapular plane to 60 degrees
  - o ER to 10-15 degrees with arm in scapular plane
  - o IR to 45 degreess with arm in scapular plane
  - Submaximal isometrics for shoulder musculature

### Week 3-4:

Continue cryotherapy PRN

### Exercises:

- Continue gentle PROM and AAROM
  - o Flexion to 90 degrees
  - Abduction to 75-85 degrees
  - o ER in scapular plane to 25-30 degrees
  - o IR in scapular plane to 55-60 degrees
- Rhythmic stabilization drills
- Proprioception training
- Tubing ER/IR at 0 degrees abduction
- Isometrics

## Week 5-6:

- Discontinue the sling for day and night
- No biceps strengthening
- Continue cryotherapy PRN

### Exercises:

- Continue to advance ROM
  - Flexion to 145 degrees
  - ER at 45 degrees abduction: 45-50 degrees
  - o IR at 45 degrees abduction: 55-60 degrees
- Stretching exercises
- · Rhythmic stabilization drills
- Light ROM at 90 degrees abduction
- Continue tubing ER/IR at 0 degrees abduction
- PNF manual resistance
- Active shoulder abduction without resistance
- "Full can" exercises with weight of arm
- Prone rowing and horizontal abduction

## PHASE II - Week 7-14

Goals: Restore full ROM by week 10, preserve the repair, restore strength and balance

### Week 7-9:

### Exercises:

- Progress ROM gradually
  - Flexion to 180 degrees
  - o ER at 90 degrees abduction: 90-95
  - o IR at 90 degrees abduction: 70-75
- Progress isotonic strengthening
- Continue PNF strengthening
- Initiate throwers program if applicable.

#### Week 10-12:

## Exercises:

- · Continue strength training
- Progress ER to thrower's motion
  - o ER at 90 degrees abduction: 110-115
- Progress isotonic strengthening
- Continue stretching exercises / progress ROM to functional demands

## PHASE III - Week 14-20

Goals: Maintain full ROM, improve strength and endurance, initiate functional activities

Criteria to enter PHASE III: Full, non-painful ROM; stability, muscular strength, no pain

## Week 14-16:

### Exercises:

- Continue stretching exercises
- Maintain thrower's motion
- Continue strengthening
- Light plyometric program
- · Restricted sport activities (light swimming, half golf swings)

### Week 16-20

- Continue all exercises listed above
- Initiate interval sport program (ie. throwing program)