



# The Orthopaedic & Fracture Clinic

## **Pectoralis Major Tendon Repair**

### **Post-Operative Protocol**

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- Begin physical therapy two weeks post op. Tendon to tendon and muscle to tendon repair; ROM progression to full at 14 to 16 weeks. Bone to tendon repair. Goal of full ROM at 12 to 14 weeks.

#### Phase I – Weeks 2 to 4

- Immobilization in sling (typically 6 to 8 weeks).
- Pendulums.
- Wrist and elbow ROM.
- PROM: ER to 0° in neutral, flexion to 45°.
- Increase ER 5° a week, flex 5° to 10° a week.
  
- Goals:
  1. Decrease pain.
  2. Protect healing tissue.
  3. Minimal to no edema.

#### Phase II – Weeks 4 to 6

- PROM: Add abduction to 30° increase by 5° a week.
- Scapular mobility exercise.
- Submaximal pain free isometrics to begin at 5 weeks (except for IR).
  
- Goals:
  1. PROM: Flexion 75°; abduction 35°; ER 0° in 15° of abduction.

#### Phase III – Weeks 6 to 8

- Initiate AAROM progress to AROM as tolerated towards week 8.
- Progress PROM ER beyond 40°.
- Isometrics: Flexion, extension, abduction, ER, horizontal abduction.

- Progress scapular strengthening.
  - Joint MOBS for capsular restrictions.
  - Begin U/E weight bearing, weight shifts, Quadped, tripod.
  - Avoid active adduction, horizontal adduction and IR.
- Goals:
    1. 75% full shoulder PROM without pain.
    2. AAROM flexion, abduction, ER, IR without scapular or upper trap substitution.

#### Phase IV – Weeks 8 to 14

- Gain full AROM through stretching and mobilization.
  - Active flexion, abduction, adduction strengthening.
  - Avoid horizontal adduction/IR/flexion.
  - Progress scapular strengthening.
  - Wall pushups progressing to table pushups.
  - Dynamic stabilization exercises.
  - Active ER, horizontal abduction – not to end ranges.
- Goals:
    1. Full AROM.
    2. Increased strength/proprioception with exercises without an increase in symptoms.

#### Phase V – Weeks 14 to 24

- Progress scapular and rotator cuff strengthening – including IR.
  - Single arm pectoralis major strengthening: Therabands then progress to dumbbell bench light weight/high reps. Avoid wide grasp and end range ER/ABD.
  - Pushups – avoid wide hand position.
  - PNF D<sub>1</sub> and D<sub>2</sub>.
  - U/E plyometrics wall taps, chest taps.
- Goals:
    1. No pain with strengthening activities.
    2. Tolerate high level strengthening and plyometrics.

#### Phase VI – 6 to 9 months

- Discourage 1 rep max bench.
- Prepare for return to sport.
  - One arm hop test as outcome measure for return to sport.