

Post-op Rehabilitation

Repair of the Ruptured Pectoralis Major Tendon

Definition: The pectoralis major muscle is a powerful internal rotator, flexor, and adductor of the arm. Rupture of the pectoralis major muscle may occur while lifting weights or participating in strenuous athletic activity. Repair of the ruptured pectoralis major muscle or tendon may restore strength and minimize cosmetic deformity.

Phase I: Immobilization Phase (Week 1 to Week 4)

Goals: Allow healing of soft tissue, decrease pain/inflammation

Regular sling and swathe for 4 weeks, including during sleep. (This sling may be cautiously removed 2-3 times per day in order to perform the exercises that follow).

Week 1

- 1) Wrist and hand AROM and gripping
- 2) Modalities prn for pain and inflammation

Weeks 2-4

- 1) Initiate pendulums within sling and continue previous exercises.
- 2) Passive pain-free forward elevation with the arm adducted is allowed to 130 degrees.
- 3) Initiate gentle elbow ROM; may progress to AA elbow flexion

Any abduction and external rotation should be strictly avoided until 9 weeks following surgery.

Phase II: Early intermediate Phase (Week 5 to Week 8)

Criteria: Minimal pain and inflammation

Goals: Gradual increase in ROM, decrease pain/inflammation

Discontinue sling during day. (The patient may wish to continue wearing the sling at night, but this is not necessary.)

- 1) Continue previous exercises
- 2) Initiate gentle periscapular strengthening
- 3) Initiate AROM of elbow – pronation, supination, flexion, and extension
- 4) Initiate gentle isometric strengthening exercises. **The patient should avoid active shoulder adduction, internal rotation, and horizontal adduction. Again, any abduction and external rotation should be strictly avoided until 9 weeks following surgery.**

Phase III: Late intermediate Phase (Week 9 to Week 12)

Criteria: Minimal pain

Goals: Achieve normal range or motion

- 1) Continue previous exercises
- 2) Add gentle stretching in abduction and external rotation.
- 3) Add gentle isometric shoulder adduction, internal rotation, and horizontal adduction.

Phase IV: Strengthening Phase (3 months)

Criteria: Full painless ROM, satisfactory clinical exam

- 1) Light resistive exercises may be initiated at 3 months. Add total body conditioning, including strength and endurance training if appropriate.
- 2) Heavy resistance exercises strengthening may be allowed at 4 ½ months.
- 3) Initiate sport/work specific drills or activities. Contact sports may be allowed at 6 to 9 months.

Return to sport, work, and prior activity level unrestricted based on physician approval and completion of rehab

Red Flags:

OK to have mild discomfort with exercises, but if it persists > 1 hr., the intensity of the exercises must be decreased.