

Pectoralis Major Tendon Repair Rehabilitation Protocol

The intent of this protocol is to provide the clinician with a guideline of the postoperative rehabilitation course of a patient that has undergone an arthroscopic Pectoralis Major Tendon Repair procedure. It is not intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam/findings, individual progress, and/or the presence of post-operative complications. If a clinician requires assistance in the progression of a post-operative patient they should consult with Dr. Fullick.

PHASE I – IMMEDIATE POST OPERATIVE PHASE (WEEKS 0-2)

Goals

- Protect healing repaired tissue
- Decrease pain and inflammation
- Establish limited range of motion (ROM)

Exercises

- No exercise until end of 2nd week

Sling

- Sling immobilization for 2 weeks
- Passive rest for full 2 weeks
- Allow soft tissue healing to begin uninterrupted
- Allow acute inflammatory response to run normal course

PHASE II – INTERMEDIATE POST OPERATIVE PHASE (WEEKS 3-6)

Goals

- Gradually increase ROM
- Promote healing of repaired tissue
- Retard muscular atrophy

Week 2

- Sling immobilization until 3rd week
- Begin passive ROM per guidelines (table 2)
 - External rotation to 0 beginning 2nd week
 - Increasing 5 degrees per week
 - Forward flexion to 45 degrees
 - Increasing 5-10 degrees per week

Week 3

- Wean out of sling immobilizer – week 3
- Continue passive ROM per guidelines (table 2)
 - Begin abduction to 30 degrees
 - Increasing 5 degrees per week
- Begin gentle isometrics to shoulder/arm EXCEPT pectoralis major
- Scapular isometric exercises

End of Week 5

- Gentle sub-maximal isometrics to shoulder, elbow, hand and wrists
- Active scapular isotonic exercises
- Passive ROM per guidelines (Table 2)
 - Flexion to 75 degrees
 - Abduction to 35 degrees
 - External rotation at 0 degrees of abduction to 15 degrees

PHASE III – LATE POST OPERATIVE PHASE (WEEKS 6-12)

Goals

- Maintain full ROM
- Promote soft tissue healing
- Gradually increase muscle strength and endurance

Week 6

- Continue passive ROM to full
- Continue gentle sub maximal isometrics progressing to isotonic exercises
- Begin sub maximal isometrics to pectoralis major in a shortened position progressing to neutral muscle tendon length.
- Avoid isometrics in full elongated position

Week 8

- Gradually increase muscle strength and endurance
- Upper body ergometer
- Progressive resistive exercises (isotonic machines)
- Theraband exercises
- PNF diagonal patterns with manual resistance
- May use techniques to alter incision thickening
- Scar mobilization techniques
- Ultrasound to soften scar tissue

Week 12

- Full shoulder ROM
 - Shoulder flexion to 180 degrees
 - Shoulder abduction to 180 degrees
 - Shoulder external rotation to 105 degrees
 - Shoulder internal rotation to 65 degrees

- Progress strengthening exercises
 - Isotonic exercises with dumbbells
 - Gentle 2-handed sub maximal plyometric drills
 - Chest pass
 - Side-to-side throws
 - Bodyblade
 - Flexbar
 - Total arm strengthening

PHASE IV – ADVANCED STRENGTHENING PHASE (WEEKS 12-16+)

Goals

- Full ROM and flexibility
- Increase muscle strength and power and endurance
- Gradually introduce sporting activities

Exercise

- Continue to progress functional activities of the entire upper extremity
- Avoid bench press motion with greater than 50% of prior 1 repetition max (RM)
- Gradually work up to 50% of 1 RM over next month.
 - Stay at 50% prior 1 RM until 6 months post-operative, then progress to full slowly after 6 month time frame

KEYS

- Don't rush ROM
- Don't rush strengthening
- Normalize arthrokinematics
- Utilize total arm strengthening