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Post-Operative Rehabilitation Protocol Pectoralis Major Repair

The following protocol is intended as a general guideline for physical therapist, athletic trainer, and patient after pectoralis major tendon repair. These guidelines are designed to facilitate the expedited and safe return to athletic or professional activity and is based on a review of the current scientific principles of shoulder rehabilitation. For the treating health care provider this protocol should not serve as a substitute for individualized clinical decision making during the patient's post-operative course following this procedure. It should rather take into consideration the individual's physical findings, progression, and possible post-operative limitations. If the therapist or patient requires assistance or encounters any postoperative complication they should consult with the surgeon.

Phase I - Protect Repair

Weeks 0-2 Goals

Pain control

Protect repair

- Shoulder sling/immobilizer for 6 weeks
- Elbow / wrist / hand AROM exercises, shoulder in neutral position
- Stationary bicycle, with shoulder sling on

Weeks 2-4 Goals

Pain control

Protect repair

- Continue shoulder sling/immobilizer for 6 weeks
- Continue previous exercises
- Pendulum shoulder exercises

Phase II – Range of Motion

Weeks 4-6 Goals

Supine PROM flexion to 90°

Protect repair

- Continue shoulder sling/immobilizer for 6 weeks
- Continue previous exercises
- PROM and supine AAROM forward flexion up to 90°, with arm in adduction
- Shoulder shrugs, scapular retraction, no resistance

Weeks 6 – 8 Goals

AROM flexion to 120°, abduction to 90°

- Discontinue sling / immobilizer
- Continue previous exercises
- AAROM
 - \circ Flexion > 90°
 - Abduction and external rotation to tolerance
 - o Internal rotation and extension, arm behind back
- Submaximal isometrics
- Treadmill walking
- Elliptical trainer without arm motion component, lower extremity only

Phase III – Early strengthening

Weeks 8 – 12

Goals

Full AROM

- Continue previous exercises
- AROM, AAROM through full motion
- Light theraband exercises for external rotation, abduction, extension
- Biceps / tricep PRE
- Prone scapular retraction exercises, no weights
- Standing wall push-ups, no elbow flexion >90°
- Elliptical trainer, upper and lower extremities

Months 3-4

Goals

Begin light strengthening

- Continue previous exercises
- Full ROM
- Light theraband exercises add internal rotation, adduction, flexion

- Push-up progression wall \rightarrow table \rightarrow chair, no elbow flexion >90°
- Very light resistive weight training, no pect flies, bench press or pull downs
 - No elbow flexion >90°
 - Seated rows
 - o Single arm pulleys/cables for internal rotation, forward elevation, adduction
 - Rotator cuff and periscapular
- Treadmill running
- Ball toss with arm at side, light weight

Phase IV – Advanced strengthening

Months 4 – 6

Goals

- Maintain painfree full ROM
- Advance strengthening
- Gradual return to functional activities
- Continue previous exercises with increasing resistance
- Overhead ball toss
- Full running program
- Swimming
- Weight training with increasing resistance
 - No bench press
 - \circ $\,$ May start pull downs and pect flies with light resistance only

Phase V – Return to full activity

Months 6+

Goals

Maintain painfree full ROM

Gradual return to recreational sports and/or strenuous work activities

- Full activities as tolerated
- Continue previous exercises with increasing weight / resistance
- May perform bench press, light weight and high repetition
 - Advance weight as tolerated
 - o Recommend indefinitely avoiding high weight, low repetition