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# PECTORALIS MAJOR REPAIR REHABILITATION PROTOCOL

## Phase I: Week 1-4

- Shoulder immobilizer at all times, except during exercises and hygiene. May remove abduction pillow.
- Elbow, wrist, hand ROM. Squeeze ball.
- No pendulums
- No running
- Week 3-4 may begin bicep curls and triceps extension with arm at side and less than 5lb weight

#### Phase II: Week 4-6

- Continue sling use. May remove for sedentary periods. Continue with nighttime use.
- Begin PROM. Limit forward flexion to 90 degrees. Avoid abduction and external rotation.
- Shoulder shrugs, protraction, retraction, and scapular mobilization.
- Stationary bike at week 3 with immobilizer on. No weight bearing on involved UE (i.e. no stairmaster.)
- No running.

Goal: 75-100% PROM, except ER—keep less than 30-40 degrees

#### Phase III: Week 6-8

- Wean out of sling as tolerated. May remove for sleep.
- Progress PROM and begin AAROM as tolerated. Can progress PROM ER beyond 45 degrees.
- Avoid active adduction, horizontal adduction and IR.
- Submaximal Isometrics: flexion, extension, abduction, ER, horizontal abduction.
- Progress scapular stabilization exercises.
- No Running

Goal: 75-100% AAROM without pain; AAROM without scapular or upper trap substitution

### Phase IV: Week 8-12

- May begin AROM as tolerated at week 8.
- Gain full ROM through stretching and Grade III mobilizations.
- Active flexion, abduction, adduction strengthening; avoid IR/flexion/horizontal adduction.
- Active ER, horizontal abduction—not to end range.
- Progress RTC and scapular strengthening program avoiding IR.
- Submaximal pectoralis strengthening.
- Pushup progression: wall  $\rightarrow$  table  $\rightarrow$  uneven surfaces.
- Dynamic stabilization, perturbations, weight-bearing planks on hands.
- May progress non-contact cardio exercises as tolerated.

Goal: Full AROM; increased strength/proprioception without an increase in symptoms.

#### Phase V: Week 12-24

- Progress RTC and scapular strengthening program, including IR.
- Single arm pectoralis strengthening: theraband → dumbbell bench with light weight/high rep, avoid wide grip and end range ER/Abduction
- Pushups, avoid humeral abduction beyond frontal plane
- Progress into UE plyometrics: wall taps, chess pass (bilateral), etc.
- Proprioceptive Neuromuscular Facilitation (PNF): D1 and D2 patterns

Goal: Progress strength without increase in symptoms, no pain with exercises.

# Phase VI: 6 Months and beyond

- Progress strengthening as tolerated
- Discourage "single repetition max bench-press"
- Release to full activity if adequate strength and proprioception
  - o 5 months anticipate return to overhead activities (i.e. tennis, swimming)
  - o 6 months anticipate return to contact sports