Center for Athletic Medicine

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Pectoralis Major Tendon Repair Rehabilitation Protocol

(Adapted from: Gregory N. Lervick, MD, Minnesota Orthopedic Sports Medicine Institute)

****Please call 773-248-4150 with any and all questions****

Phase I (1-10 days)

- Sling use at all times (except therapy) for first 6 wks.
- Decongestive massage
- Icing every other hour 15-20 minutes
- Wrist and elbow ROM particularly focusing on elbow extension
- Soft tissue massage to surrounding musculature if needed: biceps, upper trapezius, levator, etc.

Goals:

- Maintain integrity of repair
- Gradually increase passive ROM
- Diminish pain and inflammation
- Prevent muscular inhibition

Precautions:

- Maintain arm in brace, remove only for exercise for first 6 wks.
- No lifting of any objects
- No excessive shoulder abduction, no external rotation past 40° with elbow at side
- No supporting of body weight by hands
- Keep incision clean and dry

Phase II (2-6 weeks)

- Begin Codman's (long arm distraction – prone arm hang over edge of bed if too guarded).
- Begin gradual passive forward flexion as tolerated only in supine position.
- Maintain ER restriction no greater than 40° with arm neutral.
- Continue with soft tissue massage.
- Ensure full elbow supination and extension, if not, mobilize radio-ulnar joint.
- Begin using pulleys at week 4, pain free

- Scapular stabilization exercises.

Goals:

- Allow healing of soft tissue
- Do not overstress healing tissue
- Gradually restore full passive ROM
- Decrease pain and inflammation

Precautions:

- Avoid ER beyond 40 degrees with arm neutral

Phase III (6-10 weeks)

- Begin AAROM, AROM with forward elevation and if pain free can begin scapular plane, continue toward full ROM
- Gradually increase external rotation toward full ROM
- Stretch/ensure scapular thoracic mobility, AC joint mobility.
- Scapular isometrics
- Gentle capsular stretching
- AROM: Glenohumeral retraction and depression during forward elevation (flexion) while supine
- May begin light isometrics with elbow flexed to side
- Goal at 8 weeks is full passive range of motion.

Goals: Full AROM, PROM, gradual restoration of shoulder muscular endurance.

Precautions: No unrestricted weight training or contact athletics

Phase IV (10-12 weeks)

- Begin side lying exercises, partial range of motion (side lying abduction, ER, IR, extension, flexion, adduction then gradually adding weight)
- Ensure rhomboids,lower and middle trap strong and able to withstand resistance without upper trap compensation
- Strengthen serratus anterior: prone prop, wall push up, etc.
- Rhythmic stabilization exercises in supine, side lying, etc.
- Overhead ball exercises
- Chest pass, light recreational throwing
- Standing flexion, adduction PRE's with very light free weights (begin with single planes and advance to combined motions)
- Can do resistive pulleys- light weight
- Check grip strength – address elbow and forearm with increased weight
- Continue soft tissue work/joint mobilization

Goal: Introduce muscular endurance with light weight and several repetitions without upper trap compensation

Phase V (12-16 weeks)

- Seated: free weights pec fly, lat pull down (front grip to sternum – avoid excessive extension)
- Supine modified pec fly (elbows straight and bent) light resistance 1-2 pounds partial ranges, high repetitions.
- Military press free weights; bench press free weights (very light weight – 10-20 pounds)
- Partial pushups while body weight is supported on ball progressing to full pushups.
- Plyometrics against wall advancing as able
- Make sure full range of motion – continue soft tissue, joint mobilization as necessary.

Goal: Introduce dynamic/functional movement sport-specific

Phase VI (17-25 weeks)

Goal: Advance strengthening and sport specific training

This protocol provides you with general guidelines for the rehabilitation of the patient undergoing pectoralis major tendon repair.

Specific changes in the program will be made by the physician as appropriate for the individual patient.