

# Large and Massive Arthroscopic Rotator Cuff Repair (> 5 cm) Post-Operative Rehabilitation Protocol

# SUBSCAPULARIS INVOLVEMENT PRECAUTIONS:

1. Limit Passive ER to 45° until 4 weeks post-op

follow if

Only follow if checked 2. Full PROM by 8-10 weeks post-op

3. NO active/resisted IR until 6 weeks post-op

# **BICEPS TENODESIS PRECAUTIONS:**

- 1. No Resisted elbow flexion for 8 weeks
- 2. No Resisted shoulder flexion for 8 weeks
- 3. No lifting of anything over 1 or 2 pounds for 8 weeks

# \*\*IF STARRED, REFER TO CHECKED PRECAUTIONS ABOVE

## **MAJOR OBJECTIVES** for rehabilitation are:

- 1. Full **PROM** by 8-10 weeks and full **AROM** by 12 14 weeks.
- 2. No PRE's or active or passive extension until 8 10 weeks.
- 3. Perform rehabilitation activities in some degree of abduction to avoid avascularity of supraspinatus tendon.

## I. Phase One – Protective Phase (Week 0 - 8)

Goals: Decrease pain and inflammation

Protect the repair

Prevent/Decrease glenohumeral stiffness

## **Treatment:**

# A. Post-op Week 0-4

- 1. Brace or sling (4-6 weeks); per physician instruction only
- 2. Pendulum exercises
- 3. PROM: (taken to patient tolerance)
  - a. Flexion up to 130°
  - b. ER in the scapular plane to 45°
  - c. IR in the scapular plane (week 2-3)
- 4. AROM of cervical spine, elbow, and wrist
- 5. Grip and wrist strengthening
- 6. Seated scapular retractions (no shoulder extension)
- 7. Ice and pain modalities
- 8. Supine ER with wand (week 2)

<sup>\*</sup> Developed and approved by Rolando Izquierdo, M.D.





## B. Week 4-8

- 1. Discontinue brace or sling and continue all above exercises
- 2. Pulley (flexion only)
- 3. Supine wand Flexion to 130° (assist with non-surgical arm)
- 4. Supine AAROM with therapist assistance or with hands clasped
- 5. Scapular PNF (Start with passive, progress to active then resistive)
- 6. Soft tissue and joint mobilization with appropriate precautions
- \*7. Isometrics (manual submaximal): ER, IR and elbow flex (week 4 to 6)
- \*8. Supine IR/ER in scapular plane (week 6)
- \*9. Theraband IR, ER, and Extension to neutral (week 7 8)

# II. Phase Two – Intermediate Phase (Week 8 – 14)

Goals:

Establish full PROM (Week 8 to 10)

Gradually increase strength

Continue to decrease pain and inflammation

Correct scapular compensations

#### **Treatment:**

# A. Week 8-10 (begin with AROM then progress with weight)

- 1. Wand exercises for AROM
  - a. Flexion to tolerance
  - b. IR/ER to tolerance (progress to 90° shoulder ABD)
- 2. Initiate isotonic strengthening (in available ROM without compensation):
  - a. Supine flexion to tolerance
  - b. Sidelying ER
  - c. Abduction to 90 degrees
  - d. Biceps and triceps
  - e. Scapular muscles (i.e. rows with theratube)
  - f. Serratus punches
- 3. Progress to seated/standing flexion (if patient cannot elevate arm without hiking, then do more humeral head stabilization exercises and return to supine flexion progressions)
- 4. Single arm pull-downs with weight (may need assistance with scapular upward rotation to prevent hiking)
- 5. Supraspinatus (full can to 90° with proper scapulohumeral rhythm)
- 6. UBE
- 7. Prone Extension, ABD, and rowing with emphasis on scapular adduction
- 8. Supine rhythmic stabilization 2 positions (A.100 degrees flexion, 20 degrees horizontal abduction) and (B. ER/IR with 45° Abduction)

# C. Week 10 - 14

- 1. Continue all above exercises
- 2. Full AROM by 12 14 weeks
- 3. Progress rhythmic stabilization to various positions
- 4. PNF diagonals with isometric holds (gentle)

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- 5. Bodyblade (begin in scapular plane and progress to more difficult positions) (week 12)
- 6. Advance and update home exercise program, including aerobic activities

# III. Phase Three – Advanced Strengthening Phase (Week 15 – 24)

Goals: Maintain full, non-painful ROM

Continue to increase strength and neuromuscular control

Gradual return to functional activities

## **Treatment:**

## A. Week 15 - 20

- 1. Continue all above exercises as needed
- 2. Self capsular stretches
- 3. Aggressive strengthening program
  - a. Shoulder flexion, IR, ER
  - b. Shoulder ABD to 90 degrees
  - c. Supraspinatus
  - d. Elbow flexors/extensors
  - e. Scapular strengthening
  - f. PNF patterns
  - g. Push-ups (Plus)
- 4. Proprioceptive training related to specific goals and tasks
- 5. General conditioning program
- 6. Total gym
- 7. Trunk/core stabilization

## B. Week 21 - 24

- 1. Continue above exercises
- 2. Plyometric exercises
- 3. Initiate interval sport program
- 4. Determine plan for carrying through with independent home or gym exercise program

# IV. Phase Four – Return to Activity Phase (Week 24 and beyond)

Goals: Gradual return to recreational and sports activities Return to full activity at 4 months

## **Treatment:**

## A. Week 24 - 28

- 1. Continue all strengthening exercises
- 2. Continue all flexibility exercises
- 3. Continue progression on interval programs
- 4. Determine plan for carrying through with independent home or gym exercise program

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