

## ROTATOR CUFF REPAIR PROTOCOL

**If a biceps tenodesis is performed in addition to a rotator cuff repair, the rotator repair protocol is followed except that active elbow flexion is delayed until post-op week 5.**

**If a biceps tenotomy is performed, active elbow flexion is delayed until pain is resolved in the bicep, often by week 5-6.**

### **Phase 1(0-4weeks)**

Sling 6 weeks

1. Sling for everyone 4 weeks for small/medium tears and 6 week for large tears
2. Cryotherapy prn
3. Pendulum exercises
4. Wrist/elbow ROM exercises
5. Grip exercises
6. Scapular exercises
7. Day 10-14 suture removal
8. Begin PROM within precautionary ROM
  - Elevation to 120° (cane, pulleys, AAROM supine flexion, scapular plane elevation)
  - ER to 40° at 0°, 45°, 90° elevation in the scapular plane
  - IR with thumbtip to L1 (40°)
  - \*IF subscapularis repair then no elevation past 90 and no ER past neutral for 1<sup>st</sup> 4 weeks.
9. Aquatic therapy (3-4 weeks)
  - Shoulders totally submerged
  - Slow active assist motion within precautionary ROM with emphasis on good biomechanics.
  - No coronal plane abduction.
10. NO ACTIVE ROM ON LAND

### **Phase 2:**

(4-8 weeks for small/medium tears < 3 cm, 6-10 weeks for large tears)

1. Wean from sling/abduction pillow. Sling wear discouraged except as a visible sign of vulnerability in uncontrolled environment.
2. Passive ROM- Joint mobilization and stretching towards full ROM in all directions (emphasize isolated glenohumeral elevation)
3. Aquatic therapy- continue same exercises as in phase 1 without ROM limitations. Increase speed of movement as tolerated.
4. Active ROM/Initial Strengthening
  - Minimal manual resistance for isometric ER/IR at 0°, 45°, and 90° in supine with arm supported as needed
  - Minimal manual resistance for rhythmic stabilization of glenohumeral joint at multiple angles in supine (60°, 90°, 120°)
  - AAROM progressing to AROM for elevation in supine. Elevate head of bed as appropriate maintaining good mechanics.

- AAROM progressing to AROM PNF D1/D2 diagonals in supine
- ER in sidelying
- Light periscapular strengthening as appropriate (prone rowing, prone shoulder extension)

#### Home Exercise Program

1. Stretching for full ROM in all directions
2. Active exercise as directed by physical therapist
3. Cryotherapy prn

#### **Phase 3:**

8-12 weeks post-op (small/medium tears), 10-16 weeks (large) or as directed by physician

1. Glenohumeral/scapulothoracic joint mobilization/passive ROM- (target- achieve full ROM by 12 weeks)
2. AROM elevation/scaption in standing (must be performed in ROM that allows for good biomechanics; use mirror for feedback)
3. Strengthening
  - Continue manual resistance- rhythmic stabilization for IR/ER (0, 45, 90 degrees abduction) and rhythmic stabilization (flex, ext, hor abd/add) at 45, 60, 90, 120 degrees elevation in scapular plane
  - AROM progressing to light manual resistance for PNF patterns
  - Aquatic therapy- increases speed of movement, progress to using hand as a "paddle" and then to webbed gloves for increased resistance as tolerated.
  - Add light resistance (theraband or light dumbbells) as patient gains control of movement with good biomechanics.

\*For the larger tears start after 3 months\*

Include the following exercises:

  - Elevation in scapular plane (initially supine, progress to inclined, then upright)
  - Prone rowing
  - Serratus "punches"
  - Sidelying ER
  - Prone extension, hor abduction
  - ER and Extension with theraband
  - Progress to IR on light pulleys or theraband
  - Progress to **Upper Body Ergometer** (low resistance)

#### Home Exercise Program

1. Passive stretching for FROM
2. Light strengthening exercises as directed by PT

#### **Phase 4:**

(12-16 weeks for small and medium for Large tears not until 4 months or at 16 weeks)

1. Joint mobilization (glenohumeral/scapulothoracic) and PROM as needed if FROM not yet achieved
2. Progress strengthening exercises in phase 3 with increasing weight as tolerated

3. Add gym machines as appropriate (chest press, rowing, latissimus pulldown, triceps, biceps) and IR/ER at 90 degree abduction
4. May start isokinetics for IR/ER beginning in a modified position with moderate speeds (120°-240°)

#### Home Exercise Program

1. Stretching to maintain ROM as needed
2. Strengthening as directed by PT. Pt should have independent strengthening program prior to discharge from PT