

MASSIVE 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.

General Overview

Passive ROM 1st 6 weeks, active assist at 6 weeks with active at 8 weeks and strengthening at 4 months.

This following is a general guide in which progression to phase may be altered based on tear size and quality of tissue and patient.

Phase 1(0-6weeks)

1. Sling for everyone 6 week for massive tears
2. Cryotherapy prn
3. Pendulum exercises small circles
4. Wrist/elbow ROM exercises
5. Grip exercises
6. Scapular retraction exercises
7. Begin PROM within precautionary ROM with the larger tears go slower with PROM and start later in the phase. Protect the subscapularis with no ER past neutral
Elevation to 90° (cane, supine flexion, scapular plane elevation)
At 4 weeks
 - ER to 20° at 0°, 45°, 90° elevation in the scapular plane
 - IR with thumbtip to L1 (30°)
8. NO ACTIVE ROM ON LAND

Phase 2:

(6-12 weeks for massive tears >3 cm)

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) but careful with external rotation due to the subscapularis repair and go slow.
 - Gentle isometrics at 0 degree with neutral rotation then advance slowly
 - Minimal manual resistance for isometric ER/IR at 0°, 45°, and 90° in supine scapular plane with arm supported
 - 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:

12-16 weeks post-op massive tears 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
 - **4 month for massive** tears Add light resistance (theraband or light dumbbells) as patient gains control of movement with good biomechanics. 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:

(16 weeks for massive)

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

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

Phase 5:

(26 weeks on)

1. Functional progression for sports and activity-specific tasks (i.e. golf, tennis...)
 2. Interval sport programs as indicated
 3. Plyometrics with pitchback
- Advanced strengthening as indicated