

DUKE ORTHOPAEDICS OF RALEIGH

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ROTATOR CUFF REPAIR PROTOCOL

Phase 1:

Begins immediately post-op through approximately 4 weeks. For most patients this will be done at home

1. Sling with abduction pillow for everyone.
2. Cryotherapy prn
3. Pendulum exercises – (initially supported for large tears)
4. Wrist/elbow ROM exercises
5. Grip exercises
6. Scapular exercises
7. Begin PROM within precautionary ROM
 - Elevation to 140° (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°)
8. Aquatic therapy (2-4 weeks)
 - Shoulders totally submerged
 - Slow active motion within precautionary ROM with emphasis on good biomechanics.
 - No coronal plane abduction.
9. NO ACTIVE ROM ON LAND

Phase 2:

(4-8 weeks for small/medium tears < 3 cm, 6-10 weeks for large, massive tears >5 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)
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), 10-14 weeks (large/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
 - 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. 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)

- Refer to physician for advice regarding specific activity restriction
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

Phase 5:

(16-24 weeks)

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