

Large - Massive Rotator Cuff Repair Physical Therapy Protocol

Postoperative Phase I: Maximum Protection (Post-op day 1 to 6 weeks)

Goals

- Protect surgical repair
- Diminish pain and inflammation
- Gradually increase ROM
- Independence with home exercises and understanding of precautions

Precautions

- Maintain sling immobilization when not performing therapy for 1st 6 weeks post-op
- No active movements of the operated shoulder except for gentle for self-care activities
- Avoid exceeding ROM limitations set by the surgeon
- No behind the back internal rotation

Treatment Plan

- Education: precautions, sleeping postures, ADL modifications
- Cryotherapy, TENS
- Pendulum exercises
- PROM shoulder exercises only: increase forward flexion, external rotation
 - EXTERNAL ROTATION LIMITATION: _____ (if blank, no limitation)
 - Begin ER at 30° abduction in scapular plane, progressing toward 0° and 90°
- Active range of motion exercises for the elbow/wrist/hand
- Scapular stabilization exercises – shrugs and scapular retraction without arm movement

Criteria for Progression to Phase II

- Managed pain level
- PROM to at least 90 degrees forward flexion

Postoperative Phase II: Moderate Protection (6-10 weeks post-op)

Goals

- Protect surgical repair
- Diminish pain and inflammation
- Improve ROM to 80 - 100% forward flexion and external rotation
- Improve scapular stabilization, scapulohumeral rhythm and neuromuscular control
- Decrease rotator cuff inhibition

Precautions

- Sling immobilization until discontinued by surgeon (6 weeks)
- Avoid active elevation and avoid IR behind back
- No maximal cuff activation

- Avoid pain with ROM/therapeutic exercises

Treatment Plan

- Continue exercises from phase I, progress PROM as tolerated
- Begin AAROM exercises (avoid IR behind back)
- Cryotherapy, TENS
- At 8 weeks, may initiate pulleys and submaximal, pain-free isometrics in ER/IR/ABD/FLEX/EXT
- May initiate pool program for light, slow AROM exercises with arm fully submerged

Criteria for Progression to Phase III

- Ability to activate cuff and deltoid without pain
- Tolerate arm out of sling
- ROM 80% or greater for forward flexion and external rotation

Postoperative Phase III: Early Strengthening (10 to 14 weeks post-op)

Goals

- Eliminate/minimize pain and inflammation
- Restore full ROM
- Improve strength and flexibility
- Restore normal scapulohumeral rhythm below 90° elevation
- Gradually return to light ADLs below 90° elevation

Precautions

- Limit cumulative activity level and avoid overhead activity
- Avoid quick movements and heavy lifting, pushing, pulling
- Avoid extension and horizontal abduction beyond neutral

Treatment Plan

- Continue cryotherapy, TENS as needed and may initiate NMES
- Continue AAROM, progress to IR behind back
- Begin AROM and posterior capsular stretching
- At 12 weeks, initiate isotonic strengthening for scapular stabilizers and rotator cuff
 - Recommended exercises – serratus punch, row, ER and IR at 0° abduction, prone extension in ER, scaption (full-can, limited to 90°), prone horizontal abduction, biceps and triceps
- Progress to rhythmic stabilization exercises

Criteria for Progression to Phase IV

- Minimal pain and/or inflammation
- Full PROM
- Improved rotator cuff and scapular stabilizer strength
- Normal scapulohumeral rhythm with shoulder elevations below 90°

Postoperative Phase IV: Late Strengthening (15 to 21 weeks post-op)

Goals

- Improve strength to 5/5 for scapular and shoulder musculature
- Improve neuromuscular control
- Normalize scapulohumeral rhythm throughout the full ROM

Precautions

- Progress to overhead activity only when proper scapular and glenohumeral stability has been achieved
- Avoid pain with strengthening exercises

Treatment Plan

- Progress isotonic strengthening for scapular stabilizers and rotator cuff
- Add functional strengthening exercises
- Latissimus pull-down, rowing machine, biceps and triceps
- At 18 weeks may begin chest press and pushups
- Initiate plyometrics at week 18
- Continue side-lying posterior capsular stretch
- Progress scapular stabilization program (ball stabilization exercises, Body Blade, etc)

Criteria for Progression to Phase V

- Normalize scapulohumeral rhythm throughout the full ROM
- Normal strength for scapular and shoulder musculature

Postoperative Phase V: Return to Sport (22 weeks post-op and beyond)

Goals

- Maximize flexibility, strength, neuromuscular control to meet demands of sport
- Gradual return to recreational sport activities and strenuous work activities
- Independence in home/gym exercise program for maintenance and progression of functional level at discharge

Precautions

- Avoid pain with therapeutic exercise and activity
- Avoid sport activity until adequate strength, flexibility, and neuromuscular control achieved
- Surgeon clearance required for sport activity

Treatment Plan

- Continue to progress isotonic strengthening for scapular stabilizers and rotator cuff
- Continue flexibility and stabilization program
- Individualized program to meet demands of sport-specific requirements