

Post-Operative Therapy Rotator Cuff Tears

Note: This pathway is designed to serve as a guide to rehabilitation. Indications for progression should be based on patient's complete operative procedure, functional capacity and response to treatment.

Phase I – Immediate Post-Op | Weeks 0-3

Goals

- Protect surgical repair
- Reduce swelling, minimize pain
- Maintain UE ROM in elbow, hand and wrist
- Gradually increase shoulder PROM
- Minimize muscle inhibition
- Patient education

Sling

- Neutral rotation
- Use of abduction pillow in 30-45 degrees abduction
- Use at night while sleeping

Precautions

- No shoulder AROM/AAROM
- No lifting of objects
- No supporting of body weight with hands
- Avoid scapular retraction with a teres minor repair

Intervention

Swelling Management

• Ice, compression

Range of motion/Mobility

- PROM: ER<20 scapular plane, Forward elevation <90, seated GH flexion table slide, horizontal table slide
- AROM: elbow, hand, wrist (PROM elbow flexion with concomitant biceps tenodesis/tenotomy)
- AAROM: none Strengthening (Week 2)
- Periscapular: scap retraction, *prone scapular retraction*, standing scapular setting, supported scapular setting, inferior glide, low row
 - o avoid with subscapularis repair and teres minor repair
- Ball squeeze

Criteria to Progress

- 90 degrees shoulder PROM forward elevation
- 20 degrees of shoulder PROM ER in the scapular plane
- 0 degrees of shoulder PROM IR in the scapular plane
- Palpable muscle contraction felt in scapular and shoulder musculature
- No complications with Phase I

Phase II – Intermediate Post-Op | Weeks 4-6

Goals

- Continue to protect surgical repair
- Reduce swelling, minimize pain
- Maintain shoulder PROM
- Minimize substitution patterns with AAROM
- Patient education

Sling

- Neutral rotation
- Use of abduction pillow in 30-45 degrees abduction
- Use at night while sleeping

Precautions

- No lifting of objects
- No supporting of body weight with hands

Intervention

Continue with Phase I interventions

Range of motion/Mobility

- PROM: ER<20 scapular plane, Forward elevation <90
- AAROM: Active assistive shoulder flexion, shoulder flexion with cane, cane external rotation stretch, washcloth press, sidelying elevation to 90 degrees

Strengthening

• Periscapular: Row on physioball, shoulder extension on physioball

Criteria to Progress

- 90 degrees shoulder PROM forward elevation
- 20 degrees shoulder PROM ER in scapular plane
- 0 degrees of shoulder PROM IR in the scapular plane
- Minimal substitution patterns with AAROM
- Pain < 4/10
- No complications with Phase II

Phase III – Intermediate Post-Op Continued | Weeks 7-8

Goals

- Do not overstress healing tissue
- Reduce swelling, minimize pain
- Gradually increase shoulder PROM/AAROM
- Initiate shoulder AROM
- Improve scapular muscle activation
- Patient education

Sling

• Discontinue

Precautions

• No lifting of heavy objects (>10 lbs)

Criteria to Progress

- 120 degrees shoulder PROM forward elevation
- 30 degrees shoulder PROM ER and IR in scapular plane

- Minimal substitution patterns with AROM
- Pain < 4/10

Phase IV – Transitional Post-Op | Weeks 9-10

Goals

- Do not overstress healing tissue
- Gradually increase shoulder PROM/AAROM/AROM
- Improve dynamic shoulder stability
- Progress periscapular strength
- Gradually return to full functional activities

Precautions

• No lifting of heavy objects (> 10 lbs)

Intervention

Continue with Phase II-III interventions

Range of motion/mobility

- PROM: ER<45 scapular plane, Forward elevation <155, ER @ 90 ABD < 60
- AROM: supine forward elevation with elastic resistance to 90 deg, scaption and shoulder flexion to 90 degrees elevation

Strengthening

• Periscapular: Push-up plus on knees, prone shoulder extension Is, resistance band forward punch, forward punch, tripod, pointer

Criteria to Progress

- 155 degrees shoulder PROM forward elevation
- 45 degrees shoulder PROM ER and IR in scapular plane
- 60 degrees shoulder PROM ER @ 90 ABD
- 120 degrees shoulder AROM elevation
- Minimal to no substitution patterns with shoulder AROM
- Performs all exercises demonstrating symmetric scapular mechanics
- Pain < 2/10

Phase V – Transitional Post-Op Continued | Weeks 11-12

Goals

- Restore full PROM and AROM
- Enhance functional use of upper extremity

Intervention

Continue with Phase II-IV interventions

Range of motion/mobility

- PROM: Full
- AROM: Full

Stretching

• External rotation (90 degrees abduction), Hands behind head, IR behind back with towel, sidelying horizontal ADD, sleeper stretch, triceps and lats, doorjam series

Criteria to Progress

- Full pain-free PROM and AROM
- Minimal to no substitution patterns with shoulder AROM
- Performs all exercises demonstrating symmetric scapular mechanics
- Pain < 2/10

Phase VI – Strengthening Post-Op | Weeks 13-16

Goals

- Maintain pain-free ROM
- Initiate RTC strengthening (with clearance from MD)
- Initiate motor control exercise
- Enhance functional use of upper extremity

Intervention

Continue with Phase II-V interventions

Strengthening

 Rotator cuff: internal external rotation isometrics, side-lying external rotation, Standing external rotation w/ resistance band, standing internal rotation w/ resistance band, internal rotation, external rotation, sidelying ABD→standing ABD
Periscapular: T and Y, "T" exercise, push-up plus knees extended, wall push up, "W" exercise, resistance band Ws, dynamic hug, resistance band dynamic hug Biceps curl (begin with concomitant biceps tenodesis/tenotomy)

Motor Control

- Internal and external rotation in scaption and Flex 90-125 (rhythmic stabilization)
- IR/ER and Flex 90-125 (rhythmic stabilization)
- Quadruped alternating isometrics and ball stabilization on wall
- PNF D1 diagonal lifts, PNF D2 diagonal lifts
- Field goals

Criteria to Progress

- Clearance from MD and ALL milestone criteria below have been met
- Full pain-free PROM and AROM
- ER/IR strength minimum 85% of the uninvolved arm
- ER/IR ratio 60% or higher
- Negative impingement and instability signs
- Performs all exercises demonstrating symmetric scapular mechanics
- QuickDASH/PENN

Phase VII – Early Return to Sport | 4-6 Months

Goals

- Maintain pain-free ROM
- Continue strengthening and motor control exercises
- Enhance functional use of upper extremity
- Gradual return to strenuous work/sport activity

Intervention

Continue with Phase II-VI interventions

Strengthening

• Rotator cuff: External rotation at 90 degrees, internal rotation at 90 degrees, resistance band standing external rotation at 90 degrees, resistance band standing internal rotation at 90 degrees

Motor control

- Resistance band PNF pattern, PNF D1 diagonal lifts w/ resistance, diagonal-up, diagonal-down Wall slides w/ resistance band
- See specific return-to-sport/throwing program (coordinate with physician)

Criteria to Progress

• Last stage-no additional criteria

Return to Sport

For the recreational or competitive athlete, return-to-sport decision making should be individualized and based upon factors including level of demand on the upper extremity, contact vs non-contact sport, frequency of participation, etc.