

Rotator Cuff Repair Protocol: Subscapularis

Dr. Kolowich, Dr. Lock. Dr. Rill, Dr. Moutzouros

Phase I (Passive ROM): Weeks 0-6:

Surgeon's prescription instructions supersede protocol

Therapy in this stage should emphasize patient education regarding protecting the repair, proper sling wear, and edema control. Limited exercises performed at this time. Remember protection of the repair is paramount.

Range of Motion:

3-6 wks: PROM

- ER limited to 0° with arm at side in pillow
- Passive AB to 45° in scapular plane avoid full ER
- Flexion to Tolerance

May be on CPM at home for 4-6 wks.

If no CPM begin therapy at POD#2-3 or per surgeon

Can remove sling 3 times a day for AROM of hand, wrist and elbow AROM: Neck, elbow, wrist, hand; scapular motions, scapular dumping (lawn mower) gripping

Exercises:

NO Active IR for 6 weeks / NO Passive ER greater than 0°

PROM: Pendulums/ shoulder hangs/ supported pendulums – no excessive horizontal adduction At 4 weeks: AAROM: flexion to tolerance, AB to 45 ° in scapular plane

Reminders:

Sling with pillow: 4-6 wks, d/c per physician guidelines, sleep in sling for 4-6 weeks, drive once d/c sling. EDUCATE on proper sling position and posture

Phase II (AROM): Weeks 6-12: *Surgeon's prescription instructions supersede protocol*

Movement in this phase is necessary to place stress on the tissue needed to realign fibers along normal lines of stress. Allow healing of soft tissue. Minimize pain and inflammation. Increase strength/endurance

Do not force any stretching or mobilizations (grade I or II for pain relief is allowed) at this time. Range of Motion gains do not need to be achieved at this time, we need to protect the repair.

Range of Motion: Full AAROM and PROM by 12-16 wks

STAGED GOALS for minimal acceptable PROM:

External Rotation in 20° elevation in plane of the scapula Wk 6: increase ER by 10° each week

External Rotation at 90° abduction

Begin at 8 weeks increase ER by 10° each week

Abduction in Scapular Plane
Wk 6: Passively to tolerance

Range of Motion Exercises to add:

Wk 6-8: UBE - start standing, progress to sitting

AAROM- Begin in scapular plane with elevation, advance to all planes. Table wash, Pulleys, ball roll on table, cane supine progress to standing when have good scapula control, Incline table to wall washes, seated ext rot and int rot. Eventually progress to Diagonals, PNF.

PROM in all planes as tolerated. Progress ABD and Int Rot slowly to avoid impingement

Exercises to add: AROM < 90°, Isometrics in all directions

Wk 8-10: AROM to tolerance - When no compensation/hiking with AAROM. Start shoulder flex and scaption with elbow flex; progress to elbow fully extended. Begin sidelying external/internal rotation, prone row, prone clocks, lateral raises, full can in scaption - Progress to Diagonals, PNF Progression if no hiking/ compensation.

Continue and increase Glenohumeral mobs if not meeting ROM targets

Wk 10-12: Add weights/therabands with exercises.

Initiate hand behind the back (HBB) stretching (towel, pulley)

Reminders

Do not overstress healing tissue: no excessive loads, no fast gestures, Watch for compensations with AAROM and/or AROM Initiate and/or progress ONLY if overall pain is low and exercises do not increase pain No weight bearing exercises involving UEs secondary to high load to subscapularis i.e. wall push up

Phase III (Strength and Function): Weeks 12-16:

Surgeon's prescription instructions supersede protocol

Ongoing maturation of scar tissue and collagen allows greater load to be placed on the repair. Enhance dynamic shoulder stability. Restore strength, power and endurance. Gradual return to normal function, ADL's full work and recreational activities

GOALS:

Full AROM by 12-16 wks.
Full Hand behind back by 16-20wks.
Increase strength.
Return to sports

Range of Motion:

AROM PNF diagonals progress to resisted motions PROM Should be full Mobilize and stretch as needed

Strength: Initiate and/or progress ONLY if overall pain is low and exercises do not increase pain

Exercises to add: 12-16 weeks

Closed kinetic chain wt shifts: 4 point progress to 3 point (on bed), wobble boards, wall push ups Light Rhythmic stab at 90° of flex, advance to Light Rhythmic stab at 125° of flex Initiate 4 way band - towel between elbow and trunk. Resisted elbow flex/ext, Progress proprioception (wall alphabet, ball touch to wall).

Increase previous exercise's weights by 1lb/10-14 days if no pain.

Emphasis on overhead strengthening, closed kinetic chain (CKC)

Ball walk out, serratus step up (refer to Rotator Cuff manual for additional exercise ideas) Overhead press

Theraband 90/90 ext/int rot with or without arm support

Wk 16-18 - Advance proprio (Body Blade, easy ball bounce), gentle/easy eccentric loading Wk 18-20- Underhand tossing, chest pass, progress to double overhand pass controlled deceleration

Wk 24-28 light sports

Wk 26-32 Return to throwing program (as cleared by Dr.)

Return to Throw Program for Throwing Athletes 24-30 weeks:

Must be painfree, have normal ROM and scapulohumeral rhythm Rotator cuff/ scapular muscle strength 4+/5 or greater. See age specific throwing progression guidelines on the Rehab Services intranet site

Phase IV (Discharge Criteria): weeks 16-20 (for non athletes)

Discharge criteria- ROM and Strength per functional demand of Individual patient