



Rotator Cuff Repair Protocol:
Supraspinatus

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

Surgeon's prescription instructions supersede protocol

Protect repair, increase Passive ROM (PROM) per STAGED goals, decrease pain and inflammation, and prevent muscle inhibition. Minimal therapy may be needed in this stage (1-4 visits) for educational purposes and initiation of a home program.

***Protect Supraspinatus – NO active Abduction and External Rotation (ext rot) (6-8 wks)**

***AVOID excessive adduction, extension and/or hand behind the back (HBB) position (10 wks).**

Range of Motion:

0-4 wks: PROM ONLY

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

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

Staged Goals for minimal acceptable PROM:

Ext rot in 20° of elevation in plane of the scapula (use a pillow for positioning as needed)

Wk 1: 0-20°

Wk 3: 15-40°

Wk 6: 30-60°

At 90° abduction: 40-60°

Internal Rotation (int rot) (use pillow): To stomach, arm initially in scapular plane

Forward elevation in plane of the scapula

Wk 1-4: 60-90°

Wk 4-6: 90-125°

Exercises:

Gentle Mobs and Stretching: Glenohumeral and scapula as needed

PROM: Pendulums (start at 6 wks for Dr Kolowich's patients) – no excessive horizontal adduction

AROM: Neck, elbow, wrist, hand; scapular motions, scapular dumping (lawn mower) gripping

Strength

Wk 2 GENTLE Submax painfree isometrics (push, pull, int rot, ADD): arm in sling with elbow flexed, pain free

Wk 2-3 wk: Initiate gentle double arm wt shift in standing - no excessive horizontal adduction

Wk 4 Begin GENTLE submax painfree isometrics for Ext Rot and abduction (abd)

GENTLE int rot/ext rot Rhythmic Stab: in resting position (30-60° abd in scapular plane)

Reminders:

Sling: 4-6 wks with pillow d/c per physician guidelines, 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

Range of Motion: Full AAROM and PROM by 10-12 wks

STAGED GOALS for minimal acceptable PROM:

Forward elevation in plane of the scapula

Wk 9: 130-155

Wk 12: 140-WNL

External Rotation in 20° elevation in plane of the scapula

Wk 9: 45-60+

External Rotation at 90° abduction

Wk 9: 50-75

Wk 12: 75-WNL

ACTIVE forward elevation

Wk 9: 80-120

Wk 12: 115-145+

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 other planes as tolerated. Progress ABD and Int Rot slowly to avoid impingement

Wk 8-10: AROM- 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: Initiate hand behind the back (HBB) stretching (towel, pulley)

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

Exercises to add:

Closed kinetic chain wt shifts: 4 point progress to 3 point (on bed), wobble boards

Wk 6-8: Progress and increase isometrics

Wk 9: Light Rhythmic stab at 90° of flex,

Wk 10: Initiate 4 way band - towel between elbow and trunk. Resisted elbow flex/ext, Progress proprioception (wall alphabet, ball touch to wall). Wall push ups (start with serratus push and progress to wall push up)

Wk 12: Light Rhythmic stab at 125° of flex,

Reminders

Do not overstress healing tissue: no excessive loads, no fast gestures,

Watch for compensations with AAROM and/or AROM

Initiate light function activities at WAIST level if okayed by doctor;

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

Phase III (Strength and Function): Weeks 12-20:

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 HBB 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:

Exercises to add:
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

Rotator Cuff Protocol

Surgeon's prescription instructions supersede protocol.				
Exercises	Weeks 0-6	Weeks 6-8	Weeks 8-10	Weeks 10-12
Passive ROM	X	X	X	X
(see protocol for minimal goals)				
Pendulums (Kolowich pts at 6 wks)	X	X	X	X
AROM: neck, elbow, wrist, scapula	X	X	X	X
Shoulder dumping	X	X	X	X
Gripping	X	X	X	X
Isometrics (sub max pain free)				
push, pull, int rot, add	week 2	X	X	X
ext rot, abd	week 4	X	X	X
Standing weight shifts(gentle)	week 2-3	X	X	X
Protect subraspinatus - NO active Abd and Ext Rot for 6-8 weeks.				
AVOID excessive add, ext and/or hand behind back position for 10 weeks.				
UBE		X	X	X
AAROM scapular plane		X	X	X
Table wash		X	X	X
Pulleys		X	X	X
Ball roll on table		X	X	X
Cane supine		X	X	X
Incline table to wall washes		X	X	X
4 point weight shifts		X	X	X
wobble boards		X	X	X
Isometrics (progress and increase)		X	X	X
AROM when no compensation/hiking with AAROM				
Progress ONLY if overall pain is low and exercises do not increase pain.				
Shoulder flex and scaption			X	X
Sidelying ext rot and int rot			X	X
Prone row			X	X
Prone clocks			X	X
Lateral raises			X	X
Full can in scaption			X	X
PNF progression if no hiking			X	X
Light Rhythmic stabs at 90 of flex			X	X
Hand behind back stretching				X
Theraband flex, ext, int rot, ext rot				X
Resisted elbow flex/ext				X
Progress proprioception				X
wall abc's, ball touch to wall				X
Wall push ups				X
Light Rhythmic stabs at 125 of flex				X
Increase previous exercise's weights by 1lb every 10-14 days if no pain.				
Emphasis on overhead strengthening closed kinetic chain.				

Rotator Cuff Protocol cont				
Exercises	Weeks 12-20	Weeks 16-18	Weeks 18-20	Weeks 24-30
UE step ups	X	X	X	X
Ball walk out	X	X	X	X
Theraband wall clock	X	X	X	X
Overhead press	X	X	X	X
Theraband 90/90 int/ext rot	X	X	X	X
3 point clocks	X	X	X	X
Bodyblade		X	X	X
Wall dribble		X	X	X
Gentle/easy eccentric loading		X	X	X
Underhand tossing			X	X
Chest pass			X	X
Double overhand pass			X	X
Light sports (as cleared by Dr.)				X
Return to throwing program (per Dr.)				X
Return to throw program for throwing athletes:				
*must be painfree and have normal ROM and scapulohumeral rhythm				
*rotator cuff/scapular muscle strength 4+/5 or greater				
*see age specific throwing progression guidelines in manual or on rehab intranet				