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Large & Global Rotator Cuff Repair
(With and Without Subscapularis Repair)
Post-Operative Protocol

This protocol is intended to be a general outline for large to global tears of the rotator cuff (generally, ≥ 3 cm tear, ≥ 3 anchors, and/or poor tissue quality). The physician reserves the right to either advance or delay this protocol as deemed necessary. If so, this should be done by direct communication with the therapist, or in writing on the therapy referral form given to the patient on the day of surgery.

The patient's ability to progress to exercises in the next phase will depend on the patient's pre-surgery functional level, tear severity, and individual healing variations. Patient should not be progressed to more difficult exercises until competent and pain-free with lower level exercises.

PT Frequency and HEP	Physical therapy should begin at 1 week post-op unless otherwise instructed. Patient seen in clinic 3x/week for the first 5 weeks. Patient should be given a home exercise program tailored to their needs and advanced regularly.
Day 1 Post Op	Starting on the day of surgery, patient will perform the following exercises 3x/day as instructed by physician staff: shoulder retraction, elbow flexion/extension, and grip strengthening.
Sling	For the first 4-6 weeks, patient will wear sling with abduction wedge at all times except for bathing. Abduction wedge can be removed at 4 weeks (unless specified later by physician staff), with sling to be worn for all standing and walking activities for another 2-4 weeks (check with physician staff for case-by-case exceptions).
Pain Control	Regular use of cold packs for pain and inflammation control. Encourage patient to take pain meds as needed per MD guidance if pain limits ability to tolerate PT.
AROM Elevation Restrictions	For global cuff repairs, anti-gravity AROM elevation is generally prohibited until Week 20 post-op. This may vary due to tissue quality, so case-by-case clearance should be obtained from physician staff before initiating AROM with the patient.
General Strengthening Guidelines	To protect the repair, patient should be educated to avoid the activation of cuff muscles during PROM/AAROM in early stages of rehab. Because of the tendency to activate cuff with pulley AAROM elevation and supine cane flexion, these should be delayed until at least Week 8 post-op. Generally, resistance training for the cuff should not begin until the patient has pain-free and unrestricted mobility through the range being strengthened. Elevation strengthening should begin with body weight resistance and progress first to speed pulleys and/or free weights. The use of resistance bands/cords, which provide the most resistance in the highest ranges of elevation, should not be performed for overhead strengthening until the final stage of rehabilitation. Patient should be educated to expect maximal strength recovery to take 9-12 months in total.

Subscapularis Repair Guidelines	<p>If a subscapularis repair is performed, no resisted IR isometric or anti-gravity IR AROM allowed until Week 8 post-op.</p> <p>Restrict ER PROM as follows:</p> <p>For arthroscopic subscapularis repair:</p> <ul style="list-style-type: none"> • 0-4 weeks to 0° • 4-6 weeks to 45° • 6-8 weeks to 90° <p>• For open subscapularis repair:</p> <ul style="list-style-type: none"> • 0-4 weeks to 0° • 4-6 weeks to 30° • 6-8 weeks to 45° • 10-12 weeks to 90°
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Week 1: Patient seen 3x/week.

- Patient to be seen in clinic for shoulder PT-assisted PROM only (no cane AAROM).
- Supine PROM for gentle flexion and scaption, ER (to neutral), and IR to belly
- Reinforce education on post-op restrictions, proper use of pain meds, sleeping positions, dressing, axillary hygiene, and proper fit/use of post-op sling with wedge.
- Review immediate post-op exercises issued at surgical center

Week 2 — End of Week 7:

Patient seen 3x/week through Week 4, 2x/week through Week 7

Precautions: No AROM shoulder elevation for first 16 weeks. Patient should be instructed not to move upper arm away from body except passively.

ROM Guidelines:

PROM flexion to 140 degrees supine.

ER to 45 degrees w/arm abducted to 45 degrees by end of Week 4.

ER to 65 degrees w/arm abducted to 45 degrees by end of Week 7.

- Continue immediate post-op exercises
- Supine PROM for flexion, scaption, ER, and IR to belly
- “Walk-away” AAROM shoulder flexion (walk backwards with hand on table)
- Supine cane exercises for ER at 45° abduction
- Scapular isometrics in sidelying
- Soft tissue mobilization (parascapular, cervical) as indicated for tension relief
- Postural exercises: scapular clock, retractions
- Light cardio stationary biking and walking, low impact core & lower body strengthening with arm in sling (or at rest in supine).
- At Week 7, begin pulley or elastic band-resisted shoulder retraction and extension
- At Week 7, begin light cuff isometrics (flex, ext, add, abd, ER, and IR) at side, using 50% of patient’s effort

Week 8 — End of Week 9: Patient seen 2x/week

Goals: Full supine PROM scaption, IR to table

- Continue above exercises, increasing cuff isometrics to 75% effort
- Supine cane exercises for flexion
- Pulley-assisted AAROM exercises in sitting for flexion and scaption
- Grade 1-2 glenohumeral joint mobilization if needed for PROM gains
- Sidelying ER AROM to neutral
- Apply NMES to parascapular muscles and/or lateral and posterior cuff if patient struggles with neuromuscular activation for cuff or scapular isometrics.
- Prone scapular retraction and shoulder extension to neutral
- Gentle PROM horiz add and posterior capsule stretch

Week 10 — End of Week 11: Patient seen 2x/week

Goals: Increase GH ROM, increase parascapular strength

- Perform cuff isometrics at full effort
- Sidelying ER AROM past neutral, adding light weight once full and painfree
- Towel/pulley-assisted IR and/or modified sleeper stretch and crossbody stretch for IR AAROM
- Supine serratus anterior AROM at 90 degrees elevation (assist patient into 90-degree position in supine — or assist with non-surgical arm — to avoid AROM elevation)
- Prone mid trap strengthening (horizontal abduction)
- Pulley or elastic band-resisted ER and IR (at side) walkouts for isometric holds

Week 12 — End of Week 15: Patient seen 2x/week

Goals: Full PROM of shoulder in all planes; maximize parascapular strength

- Progress free weights for prone scapular retraction / extension / horiz abd
- Prone ER at 90 degrees abduction
- Pulley or elastic band-resisted ER and IR at side
- Quadruped position: weight-bearing serratus activation, UE weight shifts, manually-resisted rhythmic stabilization, etc.
- Gentle core strengthening to build proximal stability: chin tucks, quadruped hip activity, bridges, dead bug progression, etc.

Week 16 — 7 Months Post-Op: Patient seen 1-2x/week as needed

Goals: Full strength of rotator cuff, deltoid, and parascapular muscles. Maximize UE function for safe return to recreational and work activities.

- **At Week 16**, initiate wall walking (finger ladder) AAROM elevation. AVOID true active anti-gravity elevation or gravity-neutral AROM flexion/abduction.
- **At Week 18**, begin gravity-neutral AROM flexion and abduction to 90 degrees.
- **At Week 20 OR WHEN CLEARED BY PHYSICIAN**, begin anti-gravity AROM to 90 degrees.
- When anti-gravity AROM is 90 degrees with no deviation, progress to full anti-gravity AROM shoulder elevation, starting with flex and scaption and progressing to abduction
- **Once full AROM is achieved in any plane**, progress to light weights (free weight, isotonic pulley, etc.) as tolerated. Resistance bands should only be used if patient can perform free weight activity painfree and with no compensations
- Use of Blood Flow Restriction to increase rotator cuff and scapular muscle recruitment **if** deemed safe and appropriate for patient
- UE ball circles on wall
- Progress core strengthening for proximal stability: Pallof presses, prone and side plank progressions, lat pulls, TRX band, and Pilates Reformer activity
- Bodyblade activity progression
- PNF diagonal AROM
- Plyometric exercises with ball
- Pushups progression (wall → incline → prone)
- Begin sport and work-specific training when appropriate
- Facilitate safe return to gym weightlifting equipment as desired

Guidelines for Return to Unrestricted Activity

Patient may return to activities involving overhead lifting/throwing at approximately seven to eight months post-op, depending on size of tear, age, and the patient's specific activity requirements. Patient should maximize rotator cuff, deltoid, core, and parascapular strength and demonstrate ability to perform work or recreational activities without pain or compensation. If patient plays golf or overhead/racquet sports, initiate gradual return to play plan when deemed appropriate by therapist and physician team. Patient should be issued a customized HEP to continue after discharge from formal PT.