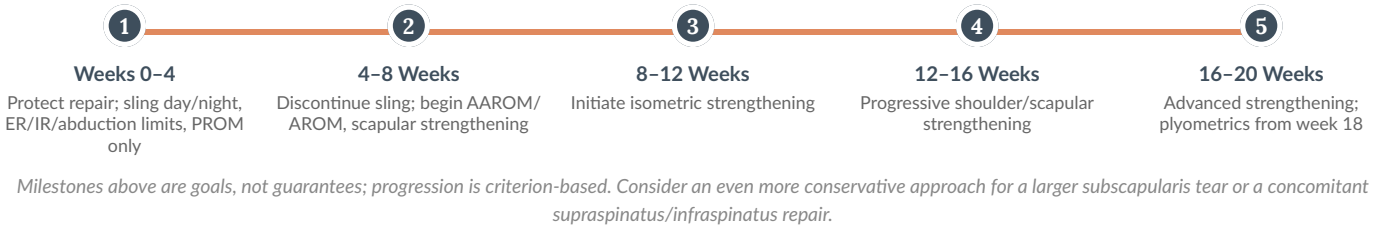


PT PROTOCOL

Rotator Cuff Repair (RTCR) – Subscapularis Repair

Rehabilitation Protocol



Phase 1 Weeks 0–4

Sling: Worn during the day and night for 4 weeks.

Range of Motion

- Passive range of motion only, within precautionary limits: external rotation limited to 30° (no forceful motion), internal rotation limited to belt line, abduction limited to 90°.
- No active range of motion of the involved arm; avoid lifting or weight-bearing with the involved arm.
- Advance to Phase 2 once pain is under 3/10 at rest, the patient can perform waist-level ADLs, and passive range of motion reaches 120° flexion and 90° abduction.

Therapeutic Exercises

- Cryotherapy and gentle compression for pain/swelling management.
- Passive range of motion within precautionary limits: pendulums, table slides.
- Elbow, wrist, and hand active range of motion.
- Scapular clock exercise in side-lying, beginning at 2 weeks post-op.

Phase 2 Weeks 4–8

Sling: Discontinue.

Range of Motion

- No external rotation with the arm at 90° abduction; avoid forceful stretching, lifting, or resisted exercises.
- Continue passive range of motion, adding external and internal rotation in neutral and with the arm at 45° abduction.
- Progress to active-assisted range of motion (lawn chair progression, rail slides, wall slides, supine abduction with support, external rotation with a dowel) and active range of motion (supine and prone flexion, prone horizontal abduction, side-lying external rotation, side-lying abduction to 90°, standing flexion/scaption to 120°).
- Advance to Phase 3 once pain is under 3/10 with active range of motion, active flexion/scaption reaches 120°, active-assisted external rotation in neutral reaches 45°, and sleep disruption is minimal.

Therapeutic Exercises

- Scapular strengthening: scapular retractions, manual scapular isometrics/rhythmic stabilization.
- Wrist and hand: resisted wrist flexion and extension.

Phase 3

Weeks 8–12

Range of Motion

- No lifting greater than 5 lbs.
- Passive range of motion in all directions to tolerance (no forceful stretching for external rotation); active and active-assisted range of motion to tolerance, progressing repetitions and motion against gravity.
- Advance to Phase 4 once active range of motion reaches at least 90% of the contralateral shoulder for flexion, abduction, and external rotation in neutral (45° at 45° abduction), muscle activation with isometric exercise is appropriate, and light household activities are well tolerated.

Therapeutic Exercises

- Shoulder isometrics: manual isometrics (internal rotation, external rotation, flexion, extension); isometric walkouts (external rotation, internal rotation, flexion, extension).
- Scapular strengthening: resisted W, supine punch.
- Elbow: biceps curls, triceps extension.
- Motor control: supine rhythmic stabilization, supine proprioceptive neuromuscular facilitation (PNF) diagonals.

Phase 4

Weeks 12–16

Range of Motion

- Stretching to normalize range of motion: posterior capsule stretch, doorway stretch, pec/biceps stretch, latissimus stretch.
- Advance to Phase 5 once pain is under 3/10 with resisted exercises, the patient can lift 5 lbs overhead and perform all household chores, manual muscle testing of the involved shoulder is better than 4/5, the ER-at-90°/IR-at-90° strength ratio reaches 70%, and DASH score is under 20%.

Therapeutic Exercises

- Resisted shoulder strengthening: external and internal rotation in neutral, scaption raises, external and internal rotation at 45° abduction.
- Scapular strengthening: wall push-ups, serratus roll-ups, rows, resisted shoulder extension, dynamic hug, chest pulls.
- Motor control: standing PNF D1/D2 (no resistance), ball-on-wall rhythmic stabilization.

Phase 5

Weeks 16–20

Range of Motion

- Full, pain-free range of motion; no pain with higher-intensity exercise or activity.
- Discharge from formal therapy once shoulder strength reaches at least 90% of the contralateral side by dynamometry, the ER-at-90°/IR-at-90° strength ratio exceeds 70%, single-arm shot put test reaches at least 90% of the contralateral side, and KCQUEST reaches more than 21 touches in 15 seconds.

Therapeutic Exercises

- Resisted PNF diagonals, overhead dumbbell press, resisted W-to-overhead press, resisted wall walks, counter push-ups, push-ups, lat pull-downs.
- Plyometrics, beginning at 18 weeks post-op or later: 90/90 ball dribbles, overhead soccer throws, medicine ball chest pass, prone and standing ball drops, 90/90 over-the-shoulder eccentric catch and throw, body blade.