

Rotator cuff repair

Postoperative Shoulder Protocol

Basic Guidelines

- Protocol has changed—less concerned about early motion.
- 1. Scapular control should be the primary focus!
- 2. Shoulder immobilizer is worn for 4-6 weeks day and night.
- 3. Avoid lifting with operated arm, although it is ok to move hand to mouth.
- 4. Avoid reaching across the body or out to the side.
- 5. Avoid reaching behind the back for 8 weeks.
- 6. Subscapularis repair limit external rotation to neutral for 4 weeks.
- 7. Each repair is different and rehabilitation should be tailored to the goals and age of the patient, as well as type and size of the repair.
- 8. The sequence of progression is more important than the time of progression

Acute Phase (0 to 4 weeks postoperative)

RANGE OF MOTION

- Shoulder immobilizer worn day & night in the neutral position for 4-6 weeks
- AAROM ER in ADD to neutral or beyond as tolerated with good scapular control. Avoid horizontal ADD
- Subscapularis repair—avoid ER beyond neutral
- Bowing if directed
- Elbow & wrist flexion/extension
- Codman's for shower to wash axilla
- Soft tissue work by PT (especially anterior structures, thoracic mobilization, and postural education)
- OK to use hand from eyes to thighs

STRENGTH

- Focus on correct scapular position, may have to manually cue patient
- Sternal lift, scapular squeeze (retraction/depression) and scapular clocks
- Lawnmower starts
- Basic lumbopelvic and core strengthening (step-ups, lunges, grid lunges, etc in sling)
- Gentle active humeral head depression (ball/table)
- Isometric extension (low row)

CARDIOVASCULAR

- Treadmill, recumbent bike, stair master and elliptical trainer with sling

Recovery Phase (4 to 8 weeks postoperative)

RANGE OF MOTION

- Discontinue sling @ 4 weeks except for crowds/school (except massive tears or patches)
- PROM for FF, scaption & ABD as tolerated
- Closed chain bowing & closed chain pendulums
- Towel slides or chair rolls with elbow flexed & closed chain bowing with trunk rotation (FF, ABD, scaption, horizontal ABD & ADD)
- Modify ranges based on tendons repaired

STRENGTH

- Continue & progress scapular stabilization program
- Closed chain inferior humeral head glide @ 90°
- Gentle active humeral head depression (ball/table)
- Ball table rolls with resistance to ball wall rolls
- Weight bearing table rocking (weight shifts: lateral, forward, back, diagonals)
- Bilateral rubber tubing in ER with cervical spine in neutral with a scapular squeeze. Not to be done unilateral.
- Once 150° passive elevation is obtained, start eccentric cuff work @ 150°
- With control @ 150°, lower arm to 90° back up to 150°, use wall as needed
- After able to lower arm w/control and without pain, allow lowering to side
- After arm lowered to side with control, start concentric elevation without resistance from 0-150° in scaption/FF
- Then Isometric wall angels @ 30/60/90° (late phase)

CARDIOVASCULAR

- Same as protective phase without sling as tolerated

Functional Phase (8 to 12 weeks postoperative)

RANGE OF MOTION

- Reestablish normal scapulohumeral rhythm in all planes
- PROM/AAROM→AROM (avoid forced IR)
- Towel slides with elbow extended
- Swiss ball rolls, advance to ball/wall rolls
- Assisted wall slides
- Prayer stretch
- Passive stretch: especially pecs, lats, IR, ER
- Increased soft tissue work prn (pecs, lats, subscap)
- Joint mobilization
- Posterior capsule/cuff stretch prn (GIRD sleeper stretch)
- Wall washes

STRENGTH

- Scapular control optimized
- Progress full kinetic chain lumbopelvic/scapulothoracic/glenohumeral program
- Advance kinetic chain strengthening (adding reach & punch at various heights as tolerated)
- Open chain strengthening below 90° is added when there is good scapular control
- Closed chain scapular retraction in push up position from table to floor, as tolerated
- Lat pull downs progress from tubing to weights
- Weight shifting: all 4's to floor progression
- Closed chain perturbations
- Side lying ER, prone ER
- Flexion and scaption raises
- Short range PNF patterns
- PNF patterns with theraband (stand, sit, prone on swiss ball)
- Seated rows with hip and lumbar flexion
- Pail dumps
- Add core stabilization to standing exercises & progress single leg→2 legs on bubble→1 leg on bubble

CARDIOVASCULAR

- Progress to impact (jogging @ 3 months)
- Cross country ski machine

Performance Phase (12-24 weeks postoperative)

RANGE OF MOTION

- ROM should be full or near full
- Soft tissue work, joint mobilizations, stretching prn
- Corner stretch, doorway stretch, GIRD side lying posterior capsule @ 70/90/120° elevation prn

EARLY STRENGTH

- Make sure exercises are age & physiology appropriate
- Weight shifting: floor progression
- Single arm rows & pull down progression (rotation to same side, hip/knee flexion to same side, hip/knee flexion/rotation to same side, 2 legs on bubble→ 1 leg on bubble)
- Push up progression (Table→floor on knees→floor on toes→abdominals on swiss ball→thighs on swiss ball→ ankles on swiss ball)
- Swiss ball weight shifting
- Bilateral ER with theraband weight bearing on elbows
- Bilateral rows & pull downs
- Add weights to step up, step down, lunge with reach and punch series

LATE STRENGTH

- Add weights to cuff specific exercises
- Swiss ball walk outs on hands progression, as tolerated
- Iron cross & snatch with theraband
- Plyoball progression
- Ball bounce on wall→single & double arm
- Open chain perturbations
- Mock throwing or tennis strokes→ to theraband→to weights
- Sport or work specific drills for endurance, quickness, agility, strength, and power (age appropriate)