

GUIDELINES FOR COMPLICATED ROTATOR CUFF REPAIR (Supraspinatus, Infrapinatus, Subscapularis) REHABILITATION

Each case can be very different depending on the goals of the patient, the age of the patient, the size of the repair, type of repair, etc. We follow these basic guidelines. Generally I prefer to avoid any strengthening exercises, lifting away from the body, or lifting beyond 5 lbs for 6 months after rotator cuff repair surgery. The re-tear rate drops off dramatically after this point. There should be no external rotation beyond neutral with a subscapularis repair for 6 weeks. Any physician-indicated precautions override these guidelines. If you had a massive rotator cuff tear, active motion will not start until 8 weeks after surgery and you should wear your sling for 8 weeks instead of 6 weeks.

Week 1-6

- ◆ Sling
 - No active shoulder motion. You may use the CPM as prescribed. No external rotation if you had a subscapularis repair. You should come out of your sling to perform pendulum exercises each day. You may also work on elbow/wrist/finger ROM each day.
 - Begin formal PT 3 weeks post-operative
 - Sleep in sling for 8 weeks
 - Elbow should be above the trunk while sleeping with arm in plane of scapula
 - Exercises emphasize standing scapular motion, retraction, depression and scapular PNF with arm in a sling
 - Use complementary trunk movement to facilitate scapular motion (flex and rotate away from involved side for protraction, extend and square or rotate toward involved side for retraction)
 - Closed Kinetic Chain rotator cuff and scapular exercises such as weight-shifting, wobble boards, and gentle stabilization
 - Towel slides on a table as tolerated
 - Passive and Active-Assisted ROM – with arm at trunk; external rotation is permitted from internal positioning to 0° external rotation
 - Active elbow flexion permitted, NO biceps loading if a tenodesis was performed.
- ◆ After 8 weeks:
 - PROM, AAROM, progress to AROM up to 90° unless otherwise indicated by physician
 - Continue CKC rotator cuff stabilization and scapular exercises, increasing arm elevation as tolerated
 - Add tolerable arm motion to standing scapular motion exercises
 - Facilitate active arm elevation through axial loading of the glenohumeral joint (patient pushes on a table or wall as he/she elevates in the desired plane)
- ◆ At 8 weeks, initiation of gentle mobilizations and capsular stretching, if indicated
 - These can become more aggressive at 8-10 weeks

Weeks 8-12

- ◆ Exercises should progress toward functional activities as ROM and strength improve
- ◆ No biceps loading until 8 weeks post-op, if a biceps tenodesis was performed
- ◆ Open chain rotator cuff strengthening when there is good scapular control and begin at < 90° elevation

- I prefer rotator cuff loading that is consistent with function, including scapular and trunk motion, rather than isolated exercise
- These include punches at various (tolerable) heights and planes, and adding arm elevation, rotation and extension of the lever arm to the complementary scapular exercises
- Avoid impingement and rotator cuff referred pain throughout

3-6 Months

- ◆ Often, formal therapy may be discontinued after 3-4 months, if near full ROM is obtained.
- ◆ If full ROM is not obtained, therapy may be continued, focusing on capsular stretching, scapular mechanics.
- ◆ My primary concern is with functional ROM, not strengthening. The patient should still protect their repair and avoid strenuous activities during this time.

EXAMPLE EXERCISES FOR FUNCTIONAL SHOULDER REHABILITATION

SCAPULAR CONTROL

When: Beginning of therapeutic exercise through the end of rehabilitation, may begin without glenohumeral motion or arm elevation, introduction of glenohumeral motion and arm elevation once indicated and scapular control increases

Goals: Facilitate scapular motion and scapular re-education, strengthen scapular musculature in functional movement patterns

Sample Exercises: Trunk diagonals, sternal lifts, shoulder dumps (incorporates glenohumeral elevation and external rotation), tubing fencing, dumbbell or tubing punch/pull, modified dumbbell “cleans”

CLOSED KINETIC CHAIN

When: Begin at the onset of therapeutic exercise and continue throughout the program

Goals: Stimulate pain-free co-contractions of the rotator cuff, scapular musculature independently and in coordination; promote glenohumeral compression and dynamic stabilization

Sample Exercises: Weight-shifting on a fixed hand, ball stabilization in appropriate plane and degree of elevation, various levels of push-ups, scapular PNF with UE fixed at 12/6 o'clock and 3/9 o'clock

AXIALLY LOADED EXERCISES

When: Glenohumeral translation or scapulohumeral coordination is determined to be the limiting factor in increasing AROM

Goals: Increase active arm elevation with appropriate rotator cuff and scapular stabilizer co-contractions, facilitation of weakest components of AROM to achieve appropriate, pain-free ROM, transition to active, open kinetic chain arm elevation

Sample Exercises: Table slides, ball rolling, wall slides, Pro-Fitter™ (Fitter International, Calgary, Alberta, Canada)

INTEGRATED EXERCISES

When: After scapular control and AROM is at or approaching normal

Goals: Integrated strengthening of scapular, rotator cuff and trunk musculature