



Arthroscopic Rotator Cuff Repair Protocol

INDICATED PROCEDURES

- Supraspinatus / Infraspinatus / Subscapularis repair
- Anterior labral repair
- Subacromial decompression
- Distal clavicle resection
- SLAP repair / Biceps tenodesis

PRECAUTIONS

- If biceps tenodesis or SLAP repair is performed, no resisted elbow flexion for 6 weeks post-op. If anterior labral repair is performed no external rotation >30 degrees for 6 weeks post-op.

PHASE I (1 - 6 weeks)

Goals

- In phase one, the general goals are to protect the surgical repair, initiate ROM to prevent adhesion and increase circulation, decrease pain and inflammation, and stress emphasis of HEP.
 - A sling will be worn for weeks unless instructed otherwise by the provider.
 - The sling is to be taken off only to perform exercises.
 - The rotator cuff gets a better blood supply when the shoulder is slightly away from the body; therefore, advocate the use of a towel roll under the arm when in a resting position.
 - The sling may be removed during the day with a pillow under the arm to maintain an abducted position.

ROM limitations:

- Passive and active-assisted ROM ONLY:
 - Flexion/scaption - Progress as tolerated (slow with a massive repair)
 - ER in scapular plane - As tolerated
 - IR in scapular plane - As tolerated
 - IR behind back with towel stretch to tolerance (reach same level as opposite shoulder)
 - Active wrist and elbow full ROM



Exercises

- ROM:
 - Pendulums
 - Manual scapular manipulation with patient lying on non-operative side
 - Supine passive FF in scapular plane to 120
 - AA cane/wand into flexion
 - Supine AA flexion
 - Seated or supine posterior cuff stretch into horizontal adduction
 - AA cane into ER at 0°; ER at 45° abduction at 3-4 weeks post-op
 - At 3-4 weeks: Initiate rope and pulley – flexion, scaption
 - Grade I-II G-H and scapular joint mobs and manual stretching
- Strength:
 - Hand gripping exercises – putty
 - NO active shoulder flexion or abduction in first 3 weeks
 - Submax pain-free shoulder isometrics at 0-20° abduction or as patient tolerates at 2-3 weeks

Modalities:

- Heat prior to treatment
- Ice following treatment and when needed

PHASE 2 (6 - 8 weeks)

Goals

- General goals in Phase II are to gradually restore ROM, initiate active muscle contractions with a focus on regaining proper scapulo-humeral rhythm, begin to train joint proprioceptive, and continue with HEP.

Limitations:

- Continue to increase flexion/elevation gradually
- Progress gradually as tolerated with ER in the scapular plane
- Continue to progress without restrictions in IR in the scapular plane

Exercises

- ROM:
 - Continue with AAROM exercises from Phase One – pulley, cane/wand
 - Initiate towel IR stretch if needed
 - Posterior capsule stretch



- G-H joint mobilizations emphasizing post and inferior glides
- Manual stretching should be performed following mobilizations
- Strength:
 - Initiate supine AROM with no resistance; progress to partial sitting, side-lying, and standing
 - IR/ER with T-band (towel roll between upper arm and thorax)
 - Side-step holding t-band at neutral IR/ER for isometric resistance
 - DB – flexion, scaption, empty can, deceleration
 - Biceps, Triceps with Theraband
 - Rhythmic stab progressing from supine to side-lying to partial sitting to standing as tolerated
 - Scapular strengthening including T-band seated rows, shrugs, punches
 - PNF patterns with manual resistance

Modalities:

- Heat prior to treatment
- Ice following treatment and when needed

PHASE 3 (8 -12 weeks)

Goals

- The goals in this phase are to restore full active ROM, progress strengthening and scapular stabilization exercises, and initiate more functional drills into rehab program. The RC muscles are very small; therefore, we use lower intensities to isolate each muscle without recruitment from surrounding larger muscles. Focus on hypertrophy initially by high volume ($V = \text{Reps} \times \text{intensity/weight}$). Following the hypertrophy phase, strength is the focus with lower reps and higher intensities/weight.
- Full ROM all planes by 10-12 weeks

Exercises

- ROM:
 - Continue with previous exercises to gain full ROM
 - May need to add chicken wing stretch for ER
 - Mobilizations may be more aggressive if needed
- Strength:
 - Continue with previous T-band and C. column exercises, increasing intensity, sets, and reps as able.
 - Continue with dumbbells, increasing sets and reps, intensity up to 7 lbs max



- Initiate push-up progression: wall, table/counter, knees, regular
- Initiate T-band ER at 90/90 position – slow and fast reps
- Initiate prone dumbbells, including scaption at 130° with thumb up, horizontal abduction with thumb up, extension with palm down, ER
- **Week 8:** Initiate two-handed plyometrics including ball toss –chest pass, OH pass, diagonals
- **Week 10:** Biodex – isokinetics for IR/ER beginning in modified neutral position, progress to 90/90 position in scapular plane

Modalities:

- Ice as needed

PHASE 4 (12- 24 weeks)

Limitations

- No body suspension exercises (push-ups, pull-ups, dips) for at least the first 6 months. In the vast majority of patients these exercises are discouraged permanently because of the risk of recurrent rotator cuff tearing.

Goals

- Goals include regaining full functional strength, implementing functional or sports specific training, and establishing a progressive gym program for continued strengthening and endurance training.

Exercises

- ROM:
 - Continue as needed with ROM exercises
- Strength:
 - Progress isometric and isokinetic strengthening slowly as tolerated.
 - UBE high resistance, for endurance
 - Progress to one-handed plyos including ball toss, ball on wall
 - Eccentric RC strengthening using plyoball, deceleration tosses, T-band
 - Large muscle exercises including shoulder press, lat pull-downs, bench press – do not allow elbow to extend past plane of thorax

This protocol provides you with general guidelines for the rehabilitation of the rotator cuff repair shoulder patients. Specific changes in the program will be made by the physician as appropriate for an individual patient. If you have any questions regarding the progress of the patient, the physician should be contacted.