



Shoulder Rehabilitation after

Arthroscopic Rotator Cuff Repair

Phase I (weeks 1-6)

Restrictions:

No active or active-assisted range of motion

- Small tears (0-1 cm). No active forward flexion for 6 weeks
- Medium tears (1-3 cm) No active range of motion for 6 weeks
- Large tears (3-5 cm) No active range or motion for 6 weeks
- Massive tears (>5 cm) No active range or motion for 8 weeks

Passive range of motion exercises allowed

- 140 degrees of forward flexion
- 40 degrees of external rotation
- 60 degrees of abduction

No strengthening until 12 weeks after surgery

- In young healthy patients with small acute tears, isometric exercises can be initiated at 8 weeks

Immobilization:

Amount of abduction depends on tear and what is required to keep tension on repair at a minimum
In the early post-op period abduction pillow helps decrease pain even in low tension tears.

Abduction pillow (tension minimized with arm at 20 - 40 degrees of abduction)

- Medium tears up to 6 weeks
- Large tears 6 weeks
- Massive tears 8 weeks

Sling only (if there is minimal tension on repair) or after transition from abduction pillow.

- Small tears 1 -3 weeks
- Medium tears 3 - 6 weeks
- Large or massive tears 6 - 8 weeks

Motion:

Shoulder Motion:

- Passive only
 - 140 degrees of forward flexion
 - 40 degrees of external rotation
 - 60 degrees of abduction
- Codman's pendulum exercises to promote early motion

Elbow Motion:

- Passive and active flexion and extension
- Passive and active supination and pronation

Muscle Strengthening:

- Grip strengthening only

Pain Control:

Medications

- Narcotics for 7 - 10 days after surgery
- NSAIDS for patients with discomfort beyond first 10 days

Therapeutic Modalities

- Moist heat before therapy, ice after therapy
- Ultrasound
- Galvanic stimulation
- TENS unit (4 patch) reduces need for narcotics

Progress to Phase II if:

- 6 weeks of recover
- Painless passive range of motion to goal

Phase II (weeks 6-12)

Restrictions:

- No strengthening or resisted range of motion until 8-12 weeks after surgery
- No active range of motion for massive tears

Immobilization:

- Discontinue use of sling or abduction pillow unless otherwise directed
- Use for comfort only

Motion:

Goals:

- 140-160 degrees of forward flexion
- 40-60 degrees of external rotation
- 60-90 degrees of abduction

Exercises:

- Continue with passive range of motion
- Begin active-assisted range or motion
- Progress to active range of motion
- Light passive stretching at the end ranges of motion

Muscle Strengthening: exercise must be pain free

- Only for non-displaced tears
- Can advance to light Thera-Band for internal and external rotation
- Can begin scapular stabilizers

Pain Control:

- NSAIDS
- Therapeutic modalities

Progress to Phase III:

- if painless active range of motion
- No shoulder pain

Phase III (months 3-6)

Restrictions:

- At home and workplace, lift keeping elbows within six inches of side- not above chest level
- Limit household and workplace lifting to five pounds until 4 months post-op

Goals:

- Improve shoulder strength, power, and endurance
- Improve shoulder proprioception
- Establish a home maintenance program performed three times per week
- Stretching exercise daily

Motion:

- Achieve motion equal to contralateral side
- Passive capsular stretching cross-body adduction and internal rotation to stretch posterior capsule

Muscle Strengthening:

- All strengthening exercises must be pain free throughout the range used
- Begin with closed-chain isometric exercise
- Progress to open-chain exercises with Thera-Bands
- Exercise with elbow bent to 90 degrees
- Start with shoulder at 0 degrees of forward flexion, abduction, and external rotation
- Arc of 45 degrees in each of five planes of motion
- Progress through 6 color-coded bands
- Progression to next level band occurs at 2-3 week intervals
- Thera-Bands permit isotonic eccentric and concentric shoulder strengthening
- Progress to isotonic dumbbell exercises in all five planes
- Strengthening of deltoid

- Strengthening of scapular stabilizers
- Closed chain
- Scapular retraction
- Scapular protraction
- Scapular depression
- Shoulder shrugs
- Progress to open chain

Functional Strengthening:

- Begin after 70% of strength recovered
- Plyometrics

Return to Sport:

- Sport-specific exercises (e.g. throwing, golfing, tennis)

Maximum Improvement:

- Small tears (4 - 6 months)
- Medium tears (6 - 8 months)
- Large tears (8 - 12 months)
- Patients will continue to show improvements in function for at least 1 year