

Arthroscopic Small to Medium Size (1-2 Tendons) Rotator Cuff Repair Protocol

The intent of this protocol is to provide the therapist and patient with guidelines for the post-operative rehabilitation course after arthroscopic rotator cuff repair. This protocol is based on a review of the best available scientific studies regarding shoulder rehabilitation. It is by no means intended to serve as a substitute for one's clinical decision making regarding the progression of a patient's post-operative course. It should serve as a guideline based on the individual's physical exam/findings, progress to date, and the absence of post-operative complications. If the therapist requires assistance in the progression of a postoperative patient they should consult with Dr. Fullick.

Progression to the next phase should be based on Clinical Criteria and/or Timeframes as appropriate.

Phase I – Immediate Post-Surgical (Weeks 1-6):

Goals:

- Maintain / protect integrity of repair
- Gradually increase passive range of motion (PROM)
- Diminish pain and inflammation
- Prevent muscular inhibition
- Become independent with activities of daily living with modifications

Precautions:

- Maintain arm in abduction sling / brace, remove only for exercise
- No active range of motion (AROM) of shoulder
- No lifting of objects
- No shoulder motion behind back
- No excessive stretching or sudden movements
- No supporting of any weight
- No lifting of body weight by hands
- Keep incision clean and dry
- Criteria for progression to the next phase (II):
- Passive forward flexion to at least 125 degrees
- Passive external rotation (ER) in scapular plane to at least 75 degrees
- Passive internal rotation (IR) in scapular plane to at least 75 degrees
- Passive Abduction to at least 90 degrees in the scapular plane

DAYS 1 TO 6:

- Abduction brace/sling
- Pendulum exercises
- Finger, wrist, and elbow AROM
- Begin scapula musculature isometrics / sets; cervical ROM
- Cryotherapy for pain and inflammation
 - Day 1-2: as much as possible (20 minutes of every hour)
 - Day 3-6: post activity, or for pain
- Sleeping in abduction sling
- Patient Education: posture, joint protection, positioning, hygiene, etc.

DAYS 7 TO 28:

- Continue use of abduction sling / brace
- Pendulum exercises
- Begin passive ROM to tolerance (these should be done supine and should be pain free)
 - Flexion to 90 degrees
 - ER in scapular plane to at least 35 degrees
 - IR to body/chest
- Continue Elbow, wrist, and finger AROM / resisted
- Cryotherapy as needed for pain control and inflammation
- May resume general conditioning program – walking, stationary bicycle, etc.
- Aquatherapy / pool therapy may begin at 3 weeks postop

Phase II – Protection / Active motion (weeks 5 - 10):

Goals:

- Allow healing of soft tissue
- Do not overstress healing tissue
- Gradually restore full passive ROM (week 4-5)
- Decrease pain and inflammation

Precautions:

- No lifting
- No supporting of body weight by hands and arms
- No sudden jerking motions
- No excessive behind the back movements
- Avoid upper extremity bike or upper extremity ergometer at all times.

Criteria for progression to the next phase (III):

- Full active range of motion

WEEK 5-6:

- Continue use of sling/brace full time until end of week 4
- Between weeks 4 and 6 may use sling/brace for comfort only
- Discontinue sling/ brace at end of week 6
- Initiate active assisted range of motion (AAROM) flexion in supine position

- Progressive passive ROM until approximately Full ROM at Week 4-5. -Gentle Scapular/glenohumeral joint mobilization as indicated to regain full passive ROM
- Initiate prone rowing to neutral arm position
- Continue cryotherapy as needed
- May use heat prior to ROM exercises
- May use pool (aquatherapy) for light active ROM exercises
- Ice after exercise

Weeks 6-8:

- Continue active and active assisted ROM and stretching exercises
- Begin rotator cuff isometrics
- Continue periscapular exercises
- Initiate active ROM exercises
 - flexion scapular plane
 - abduction
 - external rotation
 - internal rotation

Phase III – Early strengthening (weeks 10-14):

Goals:

- Full active ROM (week 10-12)
- Maintain full passive ROM
- Dynamic shoulder stability
- Gradual restoration of shoulder strength, power, and endurance
- Optimize neuromuscular control
- Gradual return to functional activities

Precautions:

- No heavy lifting of objects (no heavier than 5 lbs.)
- No sudden lifting or pushing activities
- No sudden jerking motions
- No overhead lifting
- Avoid upper extremity bike or upper extremity ergometer at all times.

Criteria for progression to the next phase (IV):

- Able to tolerate the progression to low-level functional activities
- Demonstrates return of strength/dynamic shoulder stability
- Re-establish dynamic shoulder stability
 - Demonstrates adequate strength and dynamic stability for progression to higher demanding work/sport specific activities.

WEEK 10:

- Continue stretching and passive ROM (as needed)
- Dynamic stabilization exercises
- Initiate strengthening program

- External rotation (ER)/Internal rotation (IR) with therabands/sport cord/tubing
- ER side-lying (lateral decubitus)
- Full can in scapular plane* (avoid empty can abduction exercises at all times)
- Prone rowing
- Prone horizontal abduction
- Prone extension
- Elbow flexion
- Elbow extension

*Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonic; if unable, continue glenohumeral joint exercises

WEEK 12:

- Continue all exercise listed above
- Initiate light functional activities as Dr. Fullick permits

WEEK 14:

- Continue all exercise listed above
- Progress to fundamental shoulder exercises

Phase IV – Advanced strengthening (weeks 16-22):

Goals:

- Maintain full non-painful active ROM
- Advance conditioning exercises for enhanced functional use
- Improve muscular strength, power, and endurance
- Gradual return to full functional activities

WEEK 16:

- Continue ROM and self-capsular stretching for ROM maintenance
- Continue progression of strengthening
- Advance proprioceptive, neuromuscular activities
- Light sports (golf chipping/putting, tennis ground strokes), if doing well

WEEK 20:

- Continue strengthening and stretching
- Continue stretching, if motion is tight
- May initiate interval sport program (i.e. golf, doubles tennis, etc.), if appropriate.