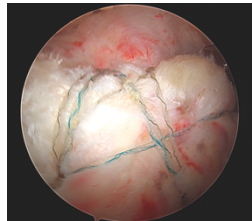


Arthroscopic Rotator Cuff Repair Protocol



The intent of this protocol is to provide the therapist 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 postoperative 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 post-operative patient they should consult with Dr. Simovitch or his Physician Assistant, Nathaniel Newara, PA-C at (561) 657-4610.

Progression to the next phase based on clinical criteria and/or time frames as appropriate. Often formal physical therapy will not be initiated until 4 to 6 weeks from surgery.

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

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



Ryan W. Simovitch, MD
Director, Shoulder Division – HSS FL
Hospital for Special Surgery - Florida
300 West Palm Beach Lakes Boulevard
West Palm Beach, FL 33401-2711
561.657.4610 p | 561.657.4615 f

DAYS 1 to 6:

- Abduction brace / sling (accompanying rx will indicate if sling can be discontinued at 4 weeks)
- 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 waking 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
- Pendulum exercises
- Begin passive ROM to tolerance (these should be done supine and be pain free)
 - Flexion to 60 degrees
 - ER in scapular plane to neutral (can progress up to 20 ° ER)
 - 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.
- Aqua therapy may begin at 3 weeks postop with same PROM parameters

PHASE II – Protection. Active Motion (weeks 6 – 10):

Goals: Allow healing of soft tissue

Do not overstress healing tissue

No sudden jerking motions

No excessive behind the back movements

Avoid upper extremity bike or upper extremity ergometer until week 8

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 6
- Between weeks 5 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
- Progression PROM until approximately full ROM at week 4 -5
 - Gentle scapular / glenohumeral joint mobilization as indicated to regain full PROM
- Initiate prone rowing to neutral arm position
- Continue cryotherapy as needed
- May use heat prior to ROM exercises
- Ice after exercise

Weeks 6 – 8:



Ryan W. Simovitch, MD
Director, Shoulder Division – HSS FL
Hospital for Special Surgery - Florida
300 West Palm Beach Lakes Boulevard
West Palm Beach, FL 33401-2711
561.657.4610 p | 561.657.4615 f

- Continue AROM and AAROM and stretching exercises
- Begin rotator cuff isometrics
- Continue periscapular exercises
- Initiate AROM exercises
 - flexion in scapular plane
 - abduction
 - external rotation
 - internal rotation

PHASE III – Early Strengthening (weeks 10-14):

Goals: Full AROM (week 10-12)

- Maintain full PROM
- 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
- Can begin extremity bike or upper extremity ergometer

Criteria for progression to the next phase (IV):

- Able to tolerate progression to low-level functional activities
- Demonstrate return of strength /dynamic shoulder stability for progression to higher demanding work / sport specific activities

WEEK 10:

- Continue stretching and PROM (as needed)
- Dynamic stabilization exercises
- Initiate strengthening program
 - ER/IR with TheraBand's / sport cord / tubing
 - ER side – lying (lateral decubitus)
 - Lateral raises*
 - Full can in scapular plane
 - Prone rowing
 - Prone horizontal abduction
 - 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 exercises listed above
- Progress to fundamental shoulder exercises



Ryan W. Simovitch, MD
Director, Shoulder Division – HSS FL
Hospital for Special Surgery - Florida
300 West Palm Beach Lakes Boulevard
West Palm Beach, FL 33401-2711
561.657.4610 p | 561.657.4615 f

PHASE IV – Advanced Strengthening (weeks 16 -22):

Goals: Maintain full non-painful AROM

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. doubles tennis, golf), if appropriate

*If a biceps tenodesis was performed please begin shoulder ROM with the elbow bent at 90° and avoid active or resisted elbow flexion for four weeks.

*Please refer to operative report for details

*If protocol needs to be modified based on intra-operative findings and details they are as follows:

NOTES: _____

