

Rotator Cuff Repair Rehabilitation Protocol Nick Avallone, M.D.

MD visit scheduled 7 days post op Physical therapy starts day 14

Phase 1: Immediate post-op (1-4 weeks after surgery)

Goals

- Protect surgical repair
- Reduce swelling, minimize pain
- Maintain UE ROM in elbow, hand and wrist
- Gradually increase shoulder PROM
- Minimize muscle inhibition
- Patient education

Sling

- Neutral rotation
- Use of abduction pillow in 30-45 degrees abduction
- Use at night while sleeping

Precautions

- Keep incision clean
- NO pulley exercises
- NO active assisted (AAROM) or active range of motion (AROM) up, out, or behind the back for the first 4 weeks
- NO lifting of objects
- NO excessive stretching or sudden movements
- NO supporting of any weight
- NO lifting of body weight by hands
- NO driving for the first 4 weeks

Weeks 3-4:

- Continue use of Ultrasling at all times except for exercise and personal hygiene
- Cryotherapy as needed for pain control and inflammation
- Pendulum exercises
- Initiate pain free passive ROM exercises to tolerance
 - Flexion to 90 degrees and progress to 125 by the end of the phase
 - Performed as table slides or supine with contralateral arm support



- NO PULLEYS until week 5
- No passive abduction until 3 weeks post-op to 90 degrees
- ER in scapular plane to 35 degrees and progress to 75 degrees by the end of the phase
 - Performed in supine with cane
 - NO ER in abduction for the first 6 weeks
- IR to body/chest and progress to 50 degrees or greater by the end of the phase
- Continue elbow, wrist, and finger AROM progressing to resisted exercises as long as the shoulder muscles are not used to support the weight
- Initiate submaximal rotator cuff isometrics for internal rotation, external rotation, flexion, abduction, and adduction in preparation for AA/AROM
- May resume general conditioning program including walking and/or stationary bicycle
- Aguatic therapy may begin at 3 weeks post-op for passive ROM only

Criteria to progress to 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 50 degrees

Phase II: Intermediate post-op (5-7 weeks after surgery)

Goals

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

Sling

- Neutral rotation
- Use of abduction pillow in 30-45 degrees abduction
- Use at night while sleeping

Precautions

- No lifting of objects
- No supporting of body weight with hands
- NO upper extremity bike or upper extremity ergometer at any time

Week 5:

- Modalities
 - Continue cryotherapy after exercises and as needed at home for pain
 - May use heat prior to ROM exercises



- Initiate active assisted range of motion (AAROM) flexion with cane in supine position and pulleys
- Continue to progress internal/external rotation in neutral position (not behind the back)
- Initiate posterior capsule stretch
- Progressive passive ROM until approximately full at end of week 5
- Gentle scapular/glenohumeral joint mobilizations as indicate to regain full PROM
- Initiate prone rowing to neutral arm position
- Aquatic therapy for light active ROM exercises

Weeks 6-7:

- Discontinue Ultrasling at end of week 6
- Continue to progress ROM and stretching exercises
- Initiate passive abduction
- Initiate internal rotation/extension stretch behind the back
- Initiate rotator cuff isometrics
- Continue scapular exercises
- Initiate active ROM exercises
 - Flexion scapular plane
 - If patient has a (+) shrug, begin exercises in supine and progress to upright
 - Abduction (NO empty can exercises)
 - External rotation
 - Internal rotation
 - Horizontal abduction

Criteria to progress to phase III

• Full active range of motion

MD visit scheduled 7 weeks post-op: please provide progress note including outcome measurement score, i.e., Penn Shoulder Score and measurements of shoulder range of motion. If the patient is having difficulty with performing any of the above activities, with compliance, or you or the patient have any other special concerns please make a note of it in your report.

Phase III: Early strengthening (8-14 weeks after surgery)

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 lifting of objects heavier than 5 pounds outside of clinic
- NO sudden lifting or pushing activities
- NO sudden jerking motions
- NO overhead lifting
- NO upper extremity bike or upper extremity ergometer at all times

Weeks 8-11:

- Continue stretching and passive ROM (as needed)
- Dynamic stabilization exercises
- Initiate strengthening program (it is permissible to progress weights to 5+pounds under PT's guidance)
 - o External rotation (ER)/internal rotation (IR) with TheraBand/sports chord/tubing
 - o ER in side-lying (lateral decubitus)
 - Prone rowing
 - Prone horizontal abduction
 - Prone extension
 - Horizontal adduction
 - Elbow flexion/extension
 - Lateral raises*
 - Full can in scapular plane (avoid empty can abduction exercises at all times)

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

Weeks 12-13:

Continue all exercises as listed above

MD visit scheduled 13 weeks post-op: please provide progress note including outcome measurement score, i.e., Penn Shoulder Score and measurements of shoulder range of motion. If the patient is having difficulty with performing any of the above activities, with compliance, or you or the patient have any other special concerns please make a note of it in your report.

Weeks 14-15:

- · Continue all exercises as listed above
- Progress to fundamental shoulder exercises
- Initiate light functional activities with physician's permission

Criteria to progress to phase IV

- Able to tolerate the progression to low-level functional activities
- Demonstrates return of strength/dynamic stability and progression to higher demanding work/sport specific activities





Phase IV: Advanced strengthening (16-22 weeks after surgery)

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

Weeks 16-19:

- 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) with physician's permission
- With physician's permission, patient may begin a structured gym program using weights and machines NO DIPS

Weeks 20-22:

- Continue strengthening and stretching
- Continue stretching, if motion is tight
- May initiate interval sport program (i.e., golf, doubles tennis) with physician's permission

References of adaptation:

Rehabilitation Protocol for Rotator Cuff Repair. Massachusetts General Hospital. Boston, MA

The above protocol is intended to be utilized by the clinician as a guideline in the treatment of this disorder. It is based on current research and has been formulated as a collaborative effort between Physicians and Physical Therapists. It is not intended to serve as a substitute for sound clinical decision making. Every patient is a unique case, and it should be anticipated that not all patients will fit into the timelines set forth in this protocol. If the Physical Therapist has any questions regarding the course of treatment, the referring physician should be contacted for further guidance.