
Arthroscopic Rotator Cuff Repair Physical Therapy Protocol Medium to Large Tears (Greater than 1 cm, Less than 4 cm, Two to Four Anchors)

Phase I: Immediate Post-operative (Days 1 to 10)

Goals

- Maintain integrity of the repair
- Gradually increase passive range of motion
- Diminish pain and inflammation
- Prevent muscular inhibition

Days 1 to 6

Brace

- Ultrasling with abduction pillow
- Sleep in sling or brace

Exercises

- Pendulum exercises four to eight times daily (flexion, circles)
- Active assisted range of motion exercise
 - Wand external rotation/internal rotation in scapular plane
- Passive range of motion
 - Flexion to tolerance
 - External rotation/internal rotation in scapular plane
- Elbow/hand gripping and range of motion exercises
- Submaximal and pain-free isometrics
 - Flexion
 - Abduction
 - External rotation
 - Internal rotation
 - Extension
- Cryotherapy with elevation for pain and inflammation every hour for 20 minutes

Days 7 to 10

Brace

- Continue ultrasling
- Continue sleeping in brace until Dr. Kendall instructs

Functional Activities

- No lifting of objects
- No excessive shoulder extension
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep incision clean and dry

Exercises

- Continue pendulum exercises
- Progress passive range of motion to tolerance

- Flexion to at least 105 degrees
- External rotation in scapular plane to 35 to 45 degrees
- Internal rotation in scapular plane to 35 to 45 degrees
- Active assisted range of motion exercises (wand)
 - External rotation/internal rotation in scapular plane
 - Flexion to tolerance*
 - *Therapist provides assistance by supporting arm
- Continue elbow/hand range of motion and gripping exercises
- Continue isometrics
- Continue cryotherapy for pain management

Phase II: Protection (Day 11 to Week 6)

Goals

- Allow healing of soft tissue
- Do **not** overstress healing tissue
- Gradually restore full passive range of motion (weeks four to five)
- Re-establish dynamic shoulder stability
- Decrease pain and inflammation

Days 11 to 14

Brace

- Ultrasling converted to regular sling by Dr. Kendall

Exercises

- Passive range of motion to tolerance
 - Flexion: 125 to 145 degrees
 - External rotation: 90 degrees abduction to at least 45 degrees
 - Internal rotation: 90 degrees abduction to at least 45 degrees
- Active assisted range of motion to tolerance
 - Flexion
 - External rotation/internal rotation in scapular plane
 - External rotation/internal rotation at 90 degrees abduction
 - Pulleys for flexion and scaption (week two)
- Dynamic stabilization drills
 - Rhythmic stabilization drills
 - External rotation/internal rotation in scapular plane
 - Flexion/extension at 100 degrees flexion
- Continue all isometric contractions
- Continue cryotherapy for pain management

Weeks 3 to 4

Brace

- Continue sling only

Range of Motion

- Patient should exhibit full passive range of motion

Exercises

- Continue all exercises listed above
- Initiate external rotation/internal rotation strengthening using exercise tubing at 0 degrees of abduction
- Initiate manual resistance external rotation supine in scapular plane
- Initiate prone rowing to neutral arm position

- Initiate isotonic elbow flexion
- May use pool for light range of motion exercises
- Continue cryotherapy for pain management
- May use heat prior to range of motion exercises

Weeks 5 to 6

Brace

- Dr. Kendall to discontinue sling

Functional Activities

- No heavy lifting of objects
- No excessive behind the back movements
- No supporting of body weight by hands and arms
- No sudden jerking motions

Exercises

- May use heat prior to exercises
- Continue active assistive range of motion and stretching exercises
 - Pulley internal rotation/towel internal rotation stretch
- Initiate active range of motion exercises
 - Shoulder flexion scapular plane
 - Shoulder abduction
 - Extension
 - Internal rotation behind back
- Begin sleeper stretch
- Progress isotonic strengthening exercise program
 - External rotation tubing
 - Sidelying external rotation
 - Prone rowing
 - Prone horizontal abduction
 - Biceps curls

Phase III: Intermediate (Weeks 7 to 14)

Goals

- Full active range of motion (weeks 8 to 10)
- Full passive range of motion
- Dynamic shoulder stability
- Gradual restoration of shoulder strength and power
- Gradual return to functional activities

Weeks 7 to 8

Functional Activities

- If Dr. Kendall permits, may initiate light functional activities

Exercises

- Continue stretching and passive range of motion (as needed to maintain full range of motion)
- Continue dynamic stabilization drills
- Progress strengthening program
 - External rotation/internal rotation tubing
 - External rotation sidelying
 - Lateral raises*
 - Full can in scapular plane*
 - 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 dynamic stabilization exercises.*

Weeks 10 to 12

Exercises

- Continue all exercise listed above
- Progress strengthening program
 - Empty can raises
 - Overhead shoulder press (begin without weight)

Weeks 12 to 14

Exercises

- Progress to independent home exercise program (fundamental shoulder exercises)

Phase IV: Advanced Strengthening (Weeks 15 to 22)

Goals

- Maintain full non-painful range of motion
- Enhance functional use of upper extremity
- Improve muscular strength and power
- Gradual return to functional activities

Week 15

Exercises

- Continue range of motion and stretching to maintain full range of motion
- Self capsular stretches
- Progress shoulder strengthening exercises
 - Fundamental shoulder exercises
- Initiate interval golf program (if appropriate)

Week 20

Exercises

- Continue all exercises listed above
- Progress golf program to playing golf (if appropriate)
- Initiate interval tennis program (if appropriate)
- May initiate swimming

Phase V: Return to Activity (Weeks 23 to 30)

Goals

- Gradual return to strenuous work activities
- Gradual return to recreational sport activities

Week 23

Maintenance Program

- Continue fundamental shoulder exercise program (at least four times weekly)
- Continue stretching, if motion is tight
- Continue progression to sport participation