

## Rotator Cuff Repair Physical Therapy Protocol

This protocol encompasses the physical therapy protocol for arthroscopic rotator cuff repair but may be modified slightly to account for additional procedures and/or special circumstances outlined by the treating orthopedic surgeon. Exercises should be gradually progressed based upon protocol recommendations and the patient's ability to perform them correctly and without an increase in pain.

The current protocol reflects our best synthesis of evidenced-based guidelines and directions for patients recovering from rotator cuff repair. This protocol is not designed to replace the judgment, communication, and experience of a skilled physical therapist. We encourage frequent communication with the surgeon if there are any questions that arise.

**If at any time there are signs of infection (increased swelling, redness, drainage from the incisions, warmth, fever, chills or severe pain that is uncontrolled with the pain medication), OR if your clinical experience suggests that the patient would benefit from seeing us sooner than their next scheduled appointment, please contact us at the office: 214-383-9356.**

Thank you for your dedicated effort!

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### Key Considerations

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#### Patient Education

- It is important to take the time initially and throughout the course of rehabilitation with patients to discuss and review important considerations related to their injury. Remember that each patient will present with different post-surgical considerations, pain levels, goals etc. Reviewing this information with the patient and what to expect throughout the rehabilitation is of paramount importance.
- Maintain arm in brace/sling at all times, including sleep. *Remove brace only for Showers, PT and Home Exercise Program. Clearance for discontinuing the brace must come from the treating orthopedic surgeon.*
- Weightlifting progression can begin at 3 months with a possible full strengthening return beginning at 6 months.
- Throwing/return to golf program can be initiated at 4 months post-op.
- Cardio/endurance: Recumbent bike only for first 6-8 weeks, then ok to begin outdoor running/treadmill/elliptical /upright stationary bike

#### Range of Motion

- Passive ROM only during the first 6-8 weeks. This should be performed with supine patient positioning.
- **NO Active ROM** for the first 6-8 weeks. **Clearance for beginning AROM must come from the treating orthopedic surgeon.**

### Expected Milestones

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|----------------------------|---------------------|
| • Sling                    | 0 – 6/8 Weeks       |
| • PROM                     | 0 – 6 Weeks         |
| • AROM                     | 6 – 12 Weeks        |
| • Strengthening            | 12 – 16 Weeks       |
| • Advanced Strengthening   | 16 – 24 Weeks       |
| • Return to Sport/Activity | 24 Weeks – 30 Weeks |

### Phase I: Day 1-Week 2 - Immediate Post-Op

Goals	<ul style="list-style-type: none"> <li>• Maintain Integrity of the Repair and Allow Rotator Cuff Healing</li> <li>• Gradually Increase Passive ROM</li> <li>• Diminish Pain and Inflammation</li> <li>• Prevent Muscular Inhibition</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>• Maintain Arm in Brace, including sleep. <i>Remove Only for Showers, PT and Home-Exercise Program</i></li> <li>• No Lifting of Objects</li> <li>• No Excessive Shoulder Extension</li> <li>• No Excessive or Aggressive Stretching or Sudden Movements</li> <li>• No Supporting of Body Weight by Hands</li> <li>• Keep Incision Clean &amp; Dry</li> </ul>
Suggested Exercises	<ul style="list-style-type: none"> <li>• Pendulum Exercises 4-8x daily (flexion, circles)</li> <li>• Hand, Wrist and Elbow Flexion exercises</li> <li>• PROM Exercises to Tolerance (performed supine) <ul style="list-style-type: none"> <li>▪ Flexion to at least 115 degrees</li> <li>▪ ER at 90 degrees abduction to at least 45-55 degrees</li> <li>▪ IR at 90 degrees abduction to at least 45-55 degrees</li> </ul> </li> <li>• Submaximal &amp; Pain-free Isometrics <ul style="list-style-type: none"> <li>▪ Flexion with bent elbow</li> <li>▪ Abduction with bent elbow</li> <li>▪ External Rotation with bent elbow</li> <li>▪ Internal Rotation with bent elbow</li> </ul> </li> <li>• Cryotherapy for Pain and Inflammation 6-8 times daily. 20 minutes on with minimum 30 minutes off.</li> </ul>
Frequency & Duration	<ul style="list-style-type: none"> <li>• Hand, Wrist Elbow Exercises; Pendulums: 4-8 times daily.</li> <li>• Formal Physical Therapy: 0-2 visits per week.</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>• Patient Tolerance</li> </ul>

### Phase II: Week 2 - 6 – Maximal Protection Phase

Goals	<ul style="list-style-type: none"> <li>• Protect the repair</li> <li>• Decrease pain and inflammation</li> <li>• Gradually restore full passive ROM</li> <li>• Re-establish dynamic shoulder stability</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>• Maintain Arm in Brace, including sleep. <i>Remove Only for Showers, PT and Home-Exercise Program.</i></li> <li>• No lifting</li> <li>• No excessive behind the back movements</li> <li>• No Supporting of Body Weight by Hands &amp; Arms</li> <li>• No Sudden jerking motions</li> </ul>

Suggested Exercises	<ul style="list-style-type: none"> <li>• Continue Use of Brace</li> <li>• Continue Hand, Wrist and Elbow Flexion exercises</li> <li>• Continue Submaximal &amp; Pain-free Isometrics</li> <li>• Initiate core exercises (begin in <i>supine</i>)</li> <li>• Passive Range of Motion to Tolerance (performed supine) <ul style="list-style-type: none"> <li>▪ Flexion to at least 145-160</li> <li>▪ ER at 90 degrees abduction to at least 75-80 degrees</li> <li>▪ IR at 90 degrees abduction to at least 55-60 degrees</li> </ul> </li> <li>• Initiate Active Assisted ROM <ul style="list-style-type: none"> <li>▪ ER/IR in scapular plane</li> <li>▪ Flexion to tolerance (<i>supine</i> with therapist guidance)</li> </ul> </li> <li>• Dynamic Stabilization (performed supine) <ul style="list-style-type: none"> <li>▪ ER/IR in scapular plane (bent elbow)</li> <li>▪ Flexion/Extension at 100 degrees shoulder flexion</li> </ul> </li> <li>• Initiate Isotonic strengthening <ul style="list-style-type: none"> <li>▪ Prone rowing to neutral arm position</li> <li>▪ Prone horizontal abduction</li> </ul> </li> </ul> <p>Week 3-4</p> <ul style="list-style-type: none"> <li>• Restore Passive ROM to full</li> <li>• Active Assisted ROM (performed supine) <ul style="list-style-type: none"> <li>▪ ER/IR in scapular plane</li> <li>▪ ER/IR at 90 abduction</li> <li>▪ Flexion</li> </ul> </li> </ul> <p>Week 5-6</p> <ul style="list-style-type: none"> <li>• Isotonic strengthening* <ul style="list-style-type: none"> <li>▪ Prone rowing to neutral arm position</li> <li>▪ Prone horizontal abduction</li> <li>▪ ER/IR using exercise tubing at 0 degrees of abduction</li> <li>▪ ER side lying</li> <li>▪ Elbow flexion</li> <li>▪ Lateral raises (begin week 8 if *)</li> <li>▪ Full can in scapular plane (begin week 8 if *)</li> </ul> </li> </ul> <p>*Patient must be able to elevate arm without shoulder or scapular hiking before initiating these isotonic exercises. If unable, continue glenohumeral dynamic stabilization exercises.</p>
Frequency & Duration	<ul style="list-style-type: none"> <li>• Hand, wrist elbow exercises; Pendulums: 4-8 times daily.</li> <li>• Formal PT 0-2 times a week</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>• MD Consultation at 6 weeks postop</li> </ul>

### Phase III: Weeks 6 - 12 - Motion/Early Strengthening Phase

Goals	<ul style="list-style-type: none"> <li>• Full Active ROM</li> <li>• Maintain Full Passive ROM</li> <li>• Dynamic Shoulder Stability</li> <li>• Gradual Restoration of Shoulder Strength and Power</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>• Active motion should always be started in the <i>supine</i> position with progression to an upright position</li> <li>• Bending elbow prior to forward flexion will help ease patient into active motion</li> <li>• Patient may initiate <i>light functional activities</i> between weeks 6-12 when <b>cleared by treating orthopedic surgeon</b></li> <li>• Active warm up for flexibility should be incorporated into rehab program</li> <li>• Return to running can begin at 6-8 weeks with <b>clearance from treating orthopaedic surgeon</b></li> </ul>
Suggested Exercises	<ul style="list-style-type: none"> <li>• Continue Stretching &amp; PROM (as needed to maintain full ROM)</li> <li>• Advanced core exercises</li> <li>• PNF and therapist directed cues</li> <li>• Active ROM (begin in <i>supine</i> and progress to upright position) <ul style="list-style-type: none"> <li>▪ Shoulder Flexion in scapular Plane</li> <li>▪ Shoulder Abduction</li> <li>▪ ER/IR</li> </ul> </li> <li>• Continue Dynamic Stabilization Drills</li> <li>• Continue Isotonic Strengthening Program</li> <li>• Continue All Isometric Contractions</li> </ul>
Frequency & Duration	<ul style="list-style-type: none"> <li>• Formal PT 2 times a week</li> <li>• Progress home strengthening/stretching program between week 8-10</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>• MD Consultation</li> </ul>

### Phase IV: Weeks 12 – 20 - Late Strengthening Phase

Goals	<ul style="list-style-type: none"> <li>• Maintain Full Non-Painful ROM</li> <li>• Enhance Functional Use of Upper Extremity</li> <li>• Improve Muscular Strengthening &amp; Power</li> <li>• Gradual Return to Functional Activities</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>• Progression of strengthening exercises should be guided specifically for the long-term activity/sports goals of the patient</li> <li>• Active warm up for flexibility should be incorporated into rehab program</li> </ul>

Suggested Exercises	<ul style="list-style-type: none"> <li>• Continue ROM &amp; Stretching to maintain full ROM</li> <li>• Advanced core exercises</li> <li>• Self-capsular stretches</li> <li>• Progress Shoulder Strengthening Exercises <ul style="list-style-type: none"> <li>○ Fundamental Shoulder Exercises</li> </ul> </li> <li>• Continue to Perform ROM Stretching, if motion is not complete</li> <li>• Throwing /return to golf/tennis program can be incorporated beginning at Week 16 with <b>clearance from treating orthopaedic surgeon</b></li> </ul>
Frequency & Duration	<ul style="list-style-type: none"> <li>• Formal PT 1-2 times a week</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>• MD Consultation</li> </ul>

### Phase V: Week 20+ - Return to Activity/Sport Phase

Goals	<ul style="list-style-type: none"> <li>• Gradual Return to Strenuous Work Activities</li> <li>• Gradual Return to Sport Activities</li> <li>• Complete return to sport from physical and psychological standpoint</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>• Continue Stretching if motion is tight</li> <li>• Active warm up for flexibility should be incorporated into rehab program</li> </ul>
Suggested Exercises	<ul style="list-style-type: none"> <li>• Weight Training with technique instruction by specialist</li> <li>• Low load upper extremity plyometrics</li> <li>• Functional movements: multiplanar movements with sports specific needs</li> <li>• Throwing Program <b>with clearance from treating orthopaedic surgeon</b></li> </ul>
Frequency & Duration	<ul style="list-style-type: none"> <li>• Can be worked out between the patient and PT</li> </ul>