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**Physical Therapy Protocol**

**Rotator Cuff Repair: Small and Medium Tears**

## Patient Name:­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

## Diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Surgery: ­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Surgery Date: \_\_\_\_\_\_\_\_\_\_\_\_

**If Subscapularis repair: Shoulder external rotation in scapular plane limited to 30° x 6 weeks**

**No shoulder external rotation at 90° abduction x6 weeks**

**No subscapularis/Internal Rotation strengthening x 9 weeks**

**Phase I - Protective Phase (Weeks 0 - 6)**

Goals:

* Protect integrity of repair.
* Gradual increase in PROM
* Gradual increase in shoulder strength
* Decrease pain and inflammation.

Precautions:

* Wear brace/sling at all times except when performing prescribed exercises + hygiene.
* No lifting of objects at all.
* No excessive shoulder extension or behind back motions.
* No sudden movements or stretching.
* No supporting of body weight or pushing up from sitting using operative arn.

**Weeks 0 - 2:**

* Sling/swathe for 6 weeks with the abduction pillow.
* Perform elbow/hand/wrist ROM exercises.
* NO PASSIVE ROM (PROM) OF SHOULDER X 2 WEEKS except pendulums.
* NO STRENGTHENING at all.
* Pain control modalities

**Weeks 3 - 4:**

* Start PROM to tolerance
  + - Flexion with goal to 90 degrees, but may be limited due to pain
    - ER/IR in scapular plane
* Encourage safe home exercise program

**Weeks 5 - 6:**

* Continue PROM and GENTLE stretching with goal of full PROM if pain allows.
  + - Flexion to 145°
    - ER/IR to 45°in scapular plane
* AAROM (start around Week 6 if can tolerate):
  + - Flexion to 120°
    - ER/IR to tolerance in scapular plane.
    - ER/IR to 30° at 90° abduction.
* Encourage safe home exercise program.

**Phase II - Intermediate Phase (Weeks 7 - 12)**

Goals:

* Full, nonpainful Active and Passive ROM by 12 weeks.
* Gradual improvement in strength and power
* Gradual return to light functional activities
* Encourage safe home exercise program

**Weeks 7 - 10:**

* Discontinue brace or sling
* Maintain full PROM and progress to full AAROM.
* AAROM:
  + - Flexion to tolerance.
    - ER/IR to tolerance in scapular plane.
    - ER/IR to tolerance at 90° abduction.
* AROM:
  + - Flexion to 90°.
* Strengthening (Start at week 7):
  + - Tubing ER @ 0° abduction.
    - Isotonics (light):
      * Prone rows to neutral arm position.
      * Prone horizontal abduction.
      * Bicep curls (1 pound weight maximum).
* Strengthening (start at week 8-9):
  + - Rhythmic Stabilization drills.
      * Flexion/Extension at 90-100° of flexion in supine.
      * ER/IR in scapular plane
    - Sub-maximal/pain-free isometrics (all with bent elbow):
      * Flexion/bicep
      * Abduction
      * ER/IR
      * Extension

**Weeks 10 -12:**

* Maintain full AAROM and progress to full AROM.
* Strengthening:
  + - Continue/progress rhythmic stabilization drills.
    - Continue tubing ER at 0° abduction working on endurance.
    - Tubing scapular strengthening to neutral working on endurance.
    - Isotonics (gradually rogress resistance):
      * Flexion to 90° (no resistance until AROM is without hiking).
      * ER/IR in side lying.
      * Prone rows.
      * Prone horizontal abduction.
      * Biceps/triceps.

**Phase III - Advanced Strengthening Phase (13 - 20 Weeks)**

Goals:

* Maintain full, non-painful ROM.
* Improve strength of general shoulder/periscapular musculature.
* Improve neuromuscular control.
* Gradual return to all functional activities.

**Weeks 13-16:**

* Maintain full PROM/AAROM/AROM
* Perform self-capsular stretches if motion is tight.
* Encourage home exercise program
* Strengthening:
  + - Continue isotonic/tubing and stabilization strengthening
    - Closed chain stabilization drills

**Weeks 16 - 20:**

* Advanced Strengthening program (at 16 weeks or earlier if tolerated): Continue isotonic/tubing and stabilization strengthening.
  + - High-speed isokinetics for ER/IR in neutral ( 16 weeks).
    - Begin general shoulder strengthening with precautions (Gradual as tolerated):
      * Latissimus pulls with narrow grip and arms in front of body.
      * Chest press with light dumbbells keeping elbows anterior to shoulder.
      * Machine rows.
      * Military press with light dumbbells and arms in front only.
* Plyometric program (2 handed 🡪 1 handed) at 16 weeks if tolerated

**Phase IV -Return to Activity Phase (Weeks 21 - 26 and beyond)**

Goals:

* Maintain shoulder ROM, strength and neuromuscular control.
* Gradual return to recreational sport activities.
* Gradual return to strenuous occupational activities.

**Weeks 21 - 24:**

* Continue flexibility, strength, stabilization and plyometric exercises.
* Isokinetic strength test for ER/IR in neutral at 180°/ sec and 300°/sec.
* Initiate interval sport program if appropriate.

**Weeks 24 - 28:**

* Continue flexibility, strength, stabilization and plyometric exercises.
* Continue with interval sport program and progress to return to sport when released.