# SMALL-MEDIUM ROTATOR CUFF REPAIR GUIDELINE

The rotator cuff is responsible for stabilization and active movement of the glenohumeral joint. An acute or overuse injury may cause the rotator cuff to be injured and varying widths of tears may cause increased pain and dysfunction of the shoulder joint. A small size rotator cuff tear is defined as a tear <1cm, medium 1-3cm. Rotator cuff repair is performed, either arthroscopically or via mini-open procedure, by suturing the torn tendon to the humerus.

## Summary of Recommendations

*NOTE: Progression is time and criterion-based, dependent on soft tissue healing, patient demographics, and clinician evaluation.*

### Risk Factors
- Avoid AROM before 6 weeks
- Correct scapular substitution with AA/AROM
- Smoking
- Postural considerations should be addressed

### Precautions
- Sling use for 4-6 weeks
  *Subscapularis Repair (12 weeks)*
- No ER past 30 degrees
- No cross body adduction
- No active IR or IR behind back
- No supporting of body weight on affected side (i.e. pushing up from chair)

### Manual Therapy
- **Week 0-2**: posterior GH, scapular mobilizations, long-axis distraction, rhythmic oscillations, PROM flexion and ER, soft tissue mobilization
- **Week 2-4**: caudal GH mobilizations, PROM abduction and IR, soft tissue mobilization as appropriate
- **Week >4**: PROM, soft tissue and joint mobilization as appropriate

### Corrective Interventions
- Pain and edema control modalities
- Manual for glenohumeral and scapular mobility and shoulder ROM
- Therapeutic exercise and neuromuscular re-education for UE strength, control and postural stability
- Therapeutic activity for return to work simulations to increase strength and endurance
- Sport-specific activity training

### Outcome Testing
- Disability of Arm, Shoulder, Hand (DASH)
- Quick DASH

### Criteria for discharge
- Full AROM with no scapular substitution
- 5/5 RTC strength
- 65-70% IR/ER isokinetic testing
Phase 1: Protection

| WEEK 0-2 | ROM | • PROM progressing per patient’s tolerance in flexion and ER.  
|          |     | • Pendulum exercises.  
|          |     | • Elbow, wrist and hand ROM  
|          |     | • Shoulder mobilization (grade I-II)- posteriorly  
|          | Strengthening | • Postural instructions to promote active scapular retraction.  
|          |     | • Scapular clock exercises – neutral humeral position with elbows at trunk  
|          | Modalities | • Ice and pain modalities as indicated  
| WEEK 2-4 | ROM | • Continue PROM  
|          |     | ▪ Begin PROM in abduction per patient tolerance  
|          |     | ▪ Shoulder joint mobilizations (grade II-III) – posterior and caudal  
|          |     | • Scapular mobilizations  
|          |     | ▪ Pectoralis minor flexibility  
|          |     | ▪ Supine postural stretch  
|          |     | ▪ Begin shoulder IR mobility – PROM only  
|          |     | ▪ Begin wand exercises in a seated position  
|          |     | ▪ Shoulder external rotation  
|          |     | ▪ Shoulder flexion if not contraindicated  
|          | Strengthening | • Begin isotonic scapular retraction/protration  
|          |     | ▪ Supine serratus punches  
|          |     | ▪ PNF patterns in sidelying (scapular clock)  
|          |     | ▪ Sitting retraction  
|          |     | ▪ Begin manual resistance scapular stabilization (late phase)  
|          |     | ▪ Scap Squeezes, extension with light resistance  
|          | Modalities | • Ice and pain modalities as indicated  

Goals for Progression to Next Phase

1. Decrease pain  
2. Full PROM supine  
3. Sleeping through the night  
4. Normal posture
## Phase 2

### WEEK 4-6

<table>
<thead>
<tr>
<th>D/C sling per physician</th>
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<tbody>
<tr>
<td>ROM</td>
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<tr>
<td>- AAROM per patient tolerance - all motions, adding abduction, IR, horizontal abduction (maintain subscapularis precautions)</td>
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<tr>
<td>- Ball on wall, UE swiss ball mobility –IR/ER</td>
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<tr>
<td>- Towel wipes on table – any direction</td>
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<tr>
<td>Strengthening</td>
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<tr>
<td>- Initiate sub-max strengthening</td>
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<tr>
<td>- Isometric flexion, extension, abduction, ER, IR</td>
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<td>- Isometric lower trap</td>
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<td>- Dynamic isometric walk-outs</td>
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<td>- Closed-chain stability – elbow extension with hand on ball performing oscillations</td>
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<td>- Progress scapular neuromuscular strengthening</td>
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### WEEK 6-8

<table>
<thead>
<tr>
<th>ROM</th>
<th>AROM per patient tolerance; avoid scapular substitution</th>
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<tbody>
<tr>
<td>Strengthening</td>
<td>UBE light resistance</td>
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<tr>
<td></td>
<td>Begin prone exercise program <strong>below shoulder level</strong></td>
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<td></td>
<td>- Extension, rows</td>
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<tr>
<td></td>
<td>Begin closed chain UE activities</td>
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<tr>
<td></td>
<td>- Towel wipes on wall – horizontal, diagonal and vertical</td>
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<tr>
<td></td>
<td>- Serratus punches</td>
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<td></td>
<td>- Quadruped weight-shifts</td>
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<td>Proprioception exercise</td>
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<td>- Supine ABC’s</td>
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<td>- Ball on wall</td>
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**Goals for Progression to Next Phase**

1. Full AROM with no scapular substitution
2. No reactive inflammation with strengthening
3. Return to full ADLs pain free
Phase 3

**WEEK 8-10**

**Strengthening**

- UBE moderate resistance
- Light T-band exercises
  - Shoulder IR/ER
  - Horizontal abduction/adduction
  - Diagonal patterns
- Progress prone exercise program
  - Row
  - Shoulder Extension
  - Horizontal Abduction – T exercise position
  - Lower Trap – Y exercise position
- Begin rhythmic stabilization exercises supine, starting at balance point position (90-100 degrees of elevation); progress to side lying, prone, standing

**Goals for Progression to Next Phase**

1. Full active ROM
2. No trapezius substitution
3. No reactive inflammation with strengthening

**WEEK 10-16**

**Strengthening**

- Progress prone exercise program
- Progressive Dumbbell Program – emphasis on high reps/low weight
  - Scaption
  - Diagonal patterns
  - Bent row
  - Prone Retraction with ER
- Functional strengthening
  - Functional positions with eccentrics loads
- Progress closed chain UE strengthening
  - Push up with a plus
  - Swiss ball activities
  - Plank BOSU weight shifts
- Trunk and lower extremity strengthening
- Begin short toss and overhead endurance activities per physician release

**Goals for Progression to Next Phase**

1. Full AROM with no scapular substitution between weeks 10-12
2. 5/5 rotator cuff strength
3. 65-70% IR/ER isokinetic testing
Phase 4 – Return to Sport / Activity

4-6 MONTHS

ROM
- Emphasis on posterior capsule stretching
- General stretching/flexibility program (pectoralis, biceps, upper trapezius, etc.)

Strengthening
- Progress T-band exercises
  - Begin Diagonal Patterns
- Progress prone exercise program with weight
  - Row
  - Shoulder Extension
  - Horizontal Abduction – T exercise position
  - Lower Trap – Y exercise position
- Progress Dumbbell Program with weight
  - Scaption
  - Diagonal patterns
  - Bent row
  - Prone Retraction with ER
- Functional eccentric strengthening
- Progress closed chain UE strengthening
  - Push up with a plus
  - Swiss ball activities
- Trunk and lower-extremity strengthening
- Initiation of throwing progression (See OSU Sports Med Throwing Program)
- Continuation of functional UE/LE strengthening and endurance activity

Goals to Return to Sport

- Completion of throwing progression
  - No reactive effusion, pain and/or instability
- 65-70% IR/ER isokinetic testing

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References
Kim YS, Chung SW, Kim JY, Ok JH, Park I, Oh JH. Is early passive motion exercise necessary