

## General Considerations

The guidelines for progression are dependent on healing timeframe for anatomic repair and performance of any associated procedures (RCR/biceps repair).

## Phase One

### Restrictive Phase: (0 to 3 weeks after surgery)

The goal of phase one is to protect anatomic repair, prevent deleterious effects of immobilization and decrease pain and inflammation.

### Range of Motion

- Gentle passive range of motion (PROM) flexion 0 to 60 degrees by week two, 60 to 75 degrees by week three, elevation in scapular plane to 60 degrees, external rotation (ER) in scapular plane to greater than 15 degrees, internal rotation (IR) in scapular plane to greater than 45 degrees, may initiate grade I/II scapular mobilization all planes
- Elbow/hand active range of motion (AROM) and gripping activities
- NO AROM or isolated biceps activation
- Sling to be utilized 24 hours a day for the first four weeks

### Modalities

- Cryotherapy, pulsed US/phonophoresis, IFC/HVGS, MHP

## Phase Two

### Moderate Protective Phase: (4 to 6 weeks after surgery)

### Considerations

May discontinue use of sling during the day; continue to wear sling at night until six weeks postoperatively.

### Range of Motion

PROM/ Assisted Active Range of Motion (AAROM)

- Flexion/Scaption           0 to 90 degrees at week four  
                                      0 to 120 degrees at week five  
                                      0 to 150 degrees at week six
- External rotation (ER) 0 to 30 degrees at week four  
                                      0 to 45 degrees at week five  
                                      0 to 60 degrees at week six
- Abduction to 75 to 85 degrees
- Internal rotation (IR) in scapular plane as tolerated
- Elbow and wrist full ROM

## Therapeutic Exercises

For ROM:

- Pendulums
- Pulleys (flexion and scaption)
- Wand exercises into flexion, ER per ROM limits
- Supine post cuff stretch into horizontal adduction
- Gentle grade I/II glenohumeral and scapular joint mobs
- Manual stretching per ROM limits

For strengthening:

- Sub-maximal isometrics for IR/ER week four progressing to light Theraband IR/ER at neutral abduction by week six
- No resisted elbow flexion or resisted shoulder flexion for six weeks
- Periscapular Stabilization (H/M/L rows, prone rows, prone horizontal abduction)
- Initiate dynamic stabilization/proprioceptive activity
- No isolated biceps contraction

## Modalities

See above

## Phase Three

### Minimally Protective Phase: (7 to 12 weeks after surgery)

The goals of phase three are to gradually restore full ROM, preserve anatomic repair, improve muscle recruitment, normalize scapulo-humeral rhythm, and enhance joint proprioception.

## Range of Motion

- Flexion/Scaption: 150 degrees progressing to full PROM by weeks seven to nine
- Full PROM in ER in scapular plane, progressing to 90/90 position
- IR full by week seven to nine
- Grade III scapular mobilizations all ranges
- Grade III-IV GH posteroinferior glides

## Therapeutic Exercises

For strength:

- IR/ER with elastic resistance in neutral abduction (use a towel roll between the upper arm and side)

Dumbbell isotonic exercises:

- flexion, scaption (full can), deceleration in sidelying (Thrower's Ten)
- Rhythmic Stabilization/Contract-Relax
- UBE (Upper body ergometry)
- Scapular stabilization (H/M/L rows, shrugs, serratus punches)
- PNF (proprioceptive neuromuscular facilitation) with light manual resistance
- Biceps curls initiated at six weeks - start with three to five pounds and progress cautiously as tolerated

## Phase Four

### **Functional Phase: (12 to 16 weeks after surgery)**

The goals of phase four are to maintain full active ROM, progress strengthening and stabilization program, and to prepare for specific functional drills.

### **Exercises**

For ROM and strengthening:

- Continue previous ROM and mobilization techniques to maintain full ROM
- Continue with elastic IR/ER resistance exercises, progressing reps, intensity, and sets. Progress from neutral to scapular to the 90/90 position
- Initiate rhythmic stabilization to the 90/90 position as patient progresses
- Progress dumbbell program (up to five pounds), progressing to more difficult positions (prone scaption thumb up, horizontal abduction thumb up, extension palm down, and ER in horizontal abduction)
- Continue with scapular strengthening/stabilization, progressing the push-up plus program
- At week eight, initiate chest pass plyometrics, progressing to overhead pass and diagonals
- At week 10, gradually progress to single arm throw, elbow extended, arm straight overhead, progressing slowly to "cocked" position

### 12 to 24 Weeks After Surgery

- Strengthening and conditioning as tolerated
- Sport-specific exercises
- Be smart about biceps work! Don't overload!