# Daniel J. Prohaska, M.D.

Advanced Orthopaedic Associates

2778 N. Webb Rd. Wichita , KS 67226

316-631-1600 Fax: (316) 631-1666 1 (800) 362-0591



## "MINI-OPEN" ROTATOR CUFF REPAIR REHABILITATION PROGRAM

Adapted from the Kerlan.lobe Orthopaedic Clinic, Department of Physical Therapy by: C.E. Brewster, MS, PT; J.L. Seto, MA, PT; and A. Lum, MA, PT

The physical therapy rehabilitation for rotator cuff repair will vary in length depending on factors such as:

- 1. Degree of shoulder instability/laxity
- 2. Acute versus chronic condition
- 3. Size of tear
- 4. Quality of tissue
- 5. Fixation method
- 6. Length of time immobilized
- 7. Strength/range-of-motion status
- 8. Performance/activity demands

#### **INITIAL 4 WEEKS POST-SURGERY**

- 1. Patient is immobilized for initial 3 4 weeks (Sleep in immobilizer)
- 2. Immobilizer may be removed for gentle passive range-of-motion (ROM) exercises (flexion, external rotation) \*Emphasis placed on external rotation ROM
- 3. Pendulum exercise (Codman's)
- 4. Active range-of-motion for shoulder internal/external rotation (arms are positioned at the side with elbows extended)
- 5. Add joint mobilizations as needed special attention to posterior capsule
- 6. Shoulder shrug exercise
- 7. Gentle shoulder submaximal isometrics to internal and external shoulder rotation
- 8. Scapulothoracic stabilization begin with isometrics progressing to isotonics as tolerated
- 9. Ball squeezes
- 10. NO active shoulder flexion or abduction during the first 4 weeks
- 11. Modalities as needed

#### **4 TO 5 WEEKS POST-SURGERY**

- 1. Patient no longer required to wear immobilizer (Wean out prn)
- 2. Use of modalities as needed (heat, ice, electrotherapy)
- 3. Continue passive range-of-motion exercises active-assistive (wall climbs, wand) and active ROM exercises may be added
- 4. Continue joint mobilization as needed emphasis on posterior capsule
- 5. Isometric exercises shoulder internal/external rotation, abduction, flexion, extension
- 6. Active internal/external rotation (as tolerated)
- 7. Active shoulder extension lying prone or standing (bending at the waist) avoid the shoulder extended position by preventing arm movement beyond the plane of the body
- 8. Active horizontal adduction (supine) as tolerated
- 9. Add strengthening exercises to the elbow and wrist joint (as necessary)

10. Add upper body ergometer for endurance training

## **6 TO 8 WEEKS POST-SURGERY**

- 1. Continue shoulder ROM exercises (passive, active-assistive and active) as needed
- 2. Continue active internal/external rotation exercises with rubber tubing as strength improves, progress to free weights

**External Rotation:** is performed lying prone with arm abducted to 90° or side-lying with the arm at the side - perform movement through available range

- Internal Rotation: is performed supine with the arm at the side and elbow flexed at 90°
- 3. Active shoulder abduction from  $0^{\circ}$   $90^{\circ}$  (No shrug sign)
- 4. Add supraspinatus strengthening exercise, if adequate ROM is available (0° 90°) the movement should be pain free and performed in the scapular plane (approximately 20° 30° forward of the coronal plane)
- 5. Active shoulder flexion through available range-of-motion (as tolerated)
- 6. Add more aggressive joint mobilization techniques if needed

## **2 TO 3 MONTHS POST-SURGERY**

- 1. Continue shoulder ROM exercises (as needed) patient should have full passive and active ROM without a shrug sign
- 2. Continue isotonic exercises with emphasis on eccentric strengthening of the rotator cuff
- 3. Add push-ups movement should be pain free begin with wall push-ups as strength improves, progress to floor push-ups (modified hands and knees, or military hands and feet) as tolerated
- 4. Add shoulder bar hang exercise to increase ROM in shoulder flexion and abduction (as needed)
- 5. Active horizontal abduction (prone)
- 6. Upper extremity PNF patterns may be added shoulder flexion/abduction/external rotation and extension/adduction/internal rotation diagonals are emphasized
- 7. Add gentle Plyometrics

### **4 MONTHS POST-SURGERY**

- 1. Add advanced capsule stretches, as necessary
- 2. Continue to progress isotonic exercises
- 3. Add military press exercise
- 4. Add progressive Plyometrics including stair-stepper and tilt board
- 5. Add pitch-back beginning with a light ball
- 6. Add total body conditioning program

#### **5 MONTHS POST-SURGERY**

- 1. Continue strengthening program emphasis may be placed on exercising the shoulder in positions specific to the sport
- 2. Continue total body conditioning program with emphasis on the shoulder (rotator cuff)
- 3. Skill mastery begin practicing skills specific to the activity (work, recreational activity, sports, etc.) for example, throwing athletes (e.g., pitchers) may proceed to throwing program
- 4. May add progressive shoulder throwing program advance through the throwing sequence, as needed