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## Post-operative Rehabilitation Protocol

### Rotator Cuff Repair

Patient will wear an abduction pillow brace/sling for 6 weeks post-op

Unless otherwise specified, do not begin PT until patient has seen MD for 2 week post-op visit.

#### **PHASE I:**

Days 0-14

- May remove sling for gentle pendulum exercise 2-3 times per day.
- Elbow/hand gripping and ROM exercises: perform 4-6 times per day.
- Cryotherapy as needed.

Weeks 2-4

- PROM - Flexion to 90°, Abduction to 90°, ER 30°, IR 30°, Extension 30°. (ER/IR in scapular plane, Flexion/extension at 90° flexion in scapular plane)
- Rhythmic stabilization drills.
- Continue all isometric contractions and use of cryotherapy as needed.
- Initiate scapular isometrics.
- Screen posture
- May begin joint mobilizations grade I and II for pain relief/relaxation.

Weeks 4-5

- PROM - Flexion to 120°, Abduction to 120°, ER 30°, IR 45°, Extension 30°.
- ER/IR in scapular plane and at 90° abduction.
- Initiate ER/IR strengthening using exercise tubing at 0° of abduction (use towel roll under arm).
- Initiate manual resistance ER in supine in scapular plane (light resistance).
- Progress scapular strengthening.
- Initiate prone rowing with arm at 30° of abduction to neutral arm position.
- Initiate prone shoulder extension with elbow flexed to 90°.
- Continue use of ice as needed. May use heat prior to ROM exercises.
- Rhythmic stabilization exercises (flexion at 45°, 90°, 100° and ER/IR at multiple angles).

Weeks 5-6

- Advance PROM in all directions as tolerated.
- Joint mobilizations: gentle scapular/glenohumeral joint mobilization as indicated to regain full PROM.
- AAROM and stretching exercises to gain full motion.
- Shoulder flexion
- ER at 90° abduction.
- Initiate AROM exercises.
- Shoulder flexion in scapular plane to 90° of flexion.
- Shoulder abduction to 90°.
- Progress isotonic strengthening exercise program.
- IR/ER tubing (towel under arm).
- Side-lying ER (towel under arm).

- Prone rowing at 45° abduction.
- Prone horizontal abduction (flexed elbow) at 90° abduction.
- Biceps curls (isotonics with very light resistance).
- Slowly progress strengthening to prevent inflammation of tendon.

Criteria to advance to Phase II:

- Full PROM.
- Flexion PROM: >125°.
- ER PROM in scapular plan to >75° (if uninvolved shoulder PROM >80°).
- IR PROM in scapular plan to >75° (if uninvolved shoulder PROM >80°).
- Abduction PROM to >90° in scapular plane.

## **PHASE II:**

Week 7

- Maintain full ROM in all planes.
- Continue dynamic stabilization drills.
- Progress AROM and light strengthening program with the addition of ER/IR tubing
- Lateral raises to 90° of abduction\*
- Full can in scapular plan to 90° elevation\*
- Prone extension
- Prone serratus punch.
- Elbow flexion and extension
- \*Must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue dynamic rhythmic stabilization glenohumeral joint exercises.\*
- Progress joint mobilizations to grades III and IV to address capsular restrictions as indicated for all shoulder girdle joints.

Weeks 8-9

- Continue as above
- Initiate light functional activities if physician permits
- In pain free ROM; starting at waist level activities, progression to shoulder level activities, then overhead activities.

Week 10

- Continue with all exercises listed above.
- Progress to fundamental shoulder exercises.
- Strengthening Exercises: addition of the following
- Standing lateral raise to 90°
- Prone Horizontal Abduction – T's.
- Prone Scaption – Y's.
- Initiate isotonic resistance (0.5kg weight) during flexion and abduction if patient exhibits non-painful normal motion without substitution patterns.

Weeks 11-14

- Progress all exercises.
- Continue ROM and flexibility exercises.
- Stretch posterior capsule with cross body adduction stretching.
- Progress strengthening program (increase 0.5kg/10 days if non-painful).

- No residual pain should be present following exercises.

Criteria to advance to Phase III:

- Full AROM and PROM.
- Pain free with all strengthening exercises.
- Dynamic shoulder stability.

### **PHASE III:**

Weeks 15-20

- Continue ROM and stretching to maintain full ROM.
- Self-capsular stretches
- Sleeper stretch
- Behind the back IR with towel
- Cross body stretch
- Doorway ER stretch
- Progress shoulder strengthening exercises

Fundamental shoulder exercises including:

- Diagonals with resistance band in D2 pattern.
- Push up plus on wall (progress to floor).
- Dynamic hug with band.
- IR at 90° with band.
- Standing forward punch with band.
- ER (supported and unsupported at 90°) with weight or band.
- Biceps curls

Weeks 20-24

- Continue all exercises listed above.
- Gradually increase resistance (patient should not exhibit pain during or after exercise and no substitution pattern).

Criteria to advance to Phase IV:

- Maintenance of full pain-free ROM.
- Functional use of upper extremity.
- Full muscular strength and power.

### **PHASE IV: Return to Activity Phase (Weeks 24-36)**

Weeks 24-26

- Continue fundamental shoulder exercise program (at least 4 times weekly).
- Continue stretching if motion is tight.
- Continue progression to sport and/or work activity/participation.