

ROTATOR CUFF REPAIR POST OPERATIVE REHAB PROTOCOL MODERATE TO LARGE (STABLE) TEARS

PHASE 1 - IMMEDIATE POST OPERATIVE: Passive Motion (0-6 weeks)

Post-op Day 1

- ◇ Immobilization in a sling throughout day and night with exception of exercises for 4-10 days. Continue use of sling during sleep for the rest of Phase 1 period.
- ◇ Pendulum (Codman's) exercises.
- ◇ Passive range of motion (PROM) of involved shoulder (**in plane of scapula**).
 - Flexion & External Rotation - 3 sets of 10 repetitions, 3x/day. Physician to set limits of motion. ***NO** passive abduction or extension to avoid undue stress on the surgical site.
- ◇ Active ROM of involved side elbow, wrist and hand.
- ◇ Light resisted hand activity with therapy putty or soft rubber ball.

NO ACTIVE MOTION FOR 9-12 WEEKS

Goals at post-op day 4-7: 0-140 degrees of Flex, 0-40 degrees of external rotation (measured in plane of scapula).

Post-op weeks 1-5

- ◇ Continue exercises as above.
- ◇ "Passive" shoulder flexion with a pulley (initiated with physician approval). Instruct patient to minimize active assist of involved shoulder.
- ◇ Passive external rotation (arm at side) with cane assist.

- Goals:
1. Elbow, wrist and hand AROM WNL's
 2. Elbow, wrist and hand strength 4/5.
 3. PROM involved shoulder: flex 0-140 degrees, external rotation 0-50 degrees

PHASE 2 - EARLY POST OPERATIVE: Initial Active Motion (9-12 WEEKS)

- ◇ Discontinue night use of sling.
- ◇ Continue PROM of involved shoulder.
- ◇ If a capsular pattern of limitation is noted at the involved shoulder, initiate gentle glenohumeral joint mobilization with therapist/physician approval (Grade I-III distraction and posterior glides only). Continue until full ROM is achieved.
- ◇ Initiate Active Assisted Rom (AAROM)
 - Encourage use of pool program to encourage glenohumeral isolation.
 - Shoulder flexion and elevation in the plane of the scapula with pulleys; progress to eccentric lowering.
- ◇ Initiate gravity eliminated AROM.
 - Flexion; sidelying
 - Abduction; supine
 - External rotation; standing
- ◇ Light shoulder isometrics all directions from a neutral position (against opposite upper extremity or wall).
- ◇ Scapular strengthening exercises
 - shoulder shrugs
 - standing shoulder protraction/retraction

- Goals:
1. Full passive ROM.
 2. 75% isolated shoulder AROM gravity eliminated.
 3. Elbow, wrist and hand strength 5/5.

PHASE 3 - INTERMEDIATE POST OPERATIVE: Shoulder muscle reeducation (12 weeks to 3 months)

- ◇ Continue PROM is limitation still exists.
- ◇ Continue AAROM.
- ◇ Initiate active shoulder flexion in supine. Progress to PRE's 1-5#'s.
- ◇ Initiate standing flexion and elevation in the plane of the scapula when PRE's reach 3-5#'s supine. Start in a bent elbow position and progress to straight. Avoid painful arc's. When able to flex shoulder in standing progress ADL's. Limit lifting to 15#'s.
- ◇ Progress pool program to include mild resistance.
- ◇ Initiate supine rhythmic stabilization.
- ◇ Scapular strengthening
 - resisted shoulder shrugs with sandbag weights over shoulder
 - bilateral upper extremity weight bearing activities (leaning against wall)

- Goals:
1. Full isolated shoulder AROM gravity eliminated.
 2. 75% isolated shoulder AROM against gravity
 3. Trapezius and serratus anterior strength 4/5

PHASE 4 - ADVANCED POST OPERATIVE: Functional skills acquisition (3-6 months)

- ◇ If full PROM not available initiate aggressive stretching and shoulder mobilization program.
- ◇ Initiate resisted biceps curls 10#'s and greater.
- ◇ Initiate resisted ROM shoulder internal/external rotation (arm at side) with Theraband.
- ◇ PRE's to the following shoulder motions:
 - flexion
 - elevation in the plane of the scapula
 - upper extremity PNF diagonals (begin with light dumbbells and/or Theraband)
- ◇ Active shoulder abduction against gravity (emphasize good scapulohumeral rhythm). When full abduction achieved progress to light PRE's.
- ◇ Initial isokinetic evaluation of shoulder internal/external rotation (when directed by physician). Begin VSRP training 90-250 degrees/second. Reevaluate every 6-8 weeks. Discontinue with total work 90% of opposite shoulder.
- ◇ Upper body ergometer 60-300 degrees/second, begin at 5 minutes and progress as tolerated.
- ◇ Prone external rotation with shoulder in 30 degree abduction.
- ◇ Prone horizontal abduction - rotator cuff rehab exercise in 4 positions.
- ◇ Continue scapular strengthening
 - rhomboid strengthening, prone with shoulder in adduction and internal rotation; progress to gentle resistance
 - sitting push-ups
 - progressive upper extremity weight bearing: prone on elbows; kneeling push-ups; standard push-ups with a plus (+) for serratus anterior emphasis.
- ◇ Military press at 15#'s with terminal push for trapezius emphasis.

- Goals:
1. Full isolated shoulder AROM against gravity.
 2. Shoulder flexion and extension strength 4/5.
 3. Isokinetic testing for shoulder external/internal rotation 70% of opposite side.
 4. Rhomboid strength 5/5.

PHASE 5 - SKILLS INTEGRATION (6 months - 1 year)

- ◇ Return to full resisted upper extremity exercise program.
- ◇ Initial isokinetic evaluation of shoulder abduction and adduction. Begin VSRP training with same parameters as shoulder internal/external rotation. Discharge parameters are also unchanged.
- ◇ Plyometric training.
- ◇ Return to throwing program as appropriate.
- ◇ Modified sports program (including solo sports).

Goals:

1. Isokinetic test 90% of opposite shoulder for abduction, adduction, external and internal rotation.
2. Scapulohumeral rhythm equal to opposite shoulder by measure of lateral scapular glide.
3. Return to sports activity.