

GUIDELINES FOR ANTERIOR SHOULDER REPAIR REHABILITATION

These patients are at rest in a sling or sling-and-swathe for ten days post-op. After seeing the surgeon, they will begin rehabilitation at approximately 2 weeks post-op.

Early (week 2-4)

- Emphasis on scapular control, pain and swelling management
 - May begin weaning from the sling at home after week 2
 - Continue sling in public until fourth week
- Begin by establishing quality scapular motion, using complementary trunk motion, hip activation and scapular PNF patterns, without concern for glenohumeral motion
- Promote scapular retraction with thoracic extension
 - Use the hips to position the spine
- De-emphasize the upper trapezius—emphasize medial and inferior scapular motion
- ♦ Address soft tissue inflexibilities especially in the pectoralis minor, upper trapezius, and levator scapulae
- ♦ CKC exercises such as weight shifts, balance boards, push-ups, and stabilization, with elevation as tolerated, to promote force couple contractions
- During this early phase glenohumeral movement includes:
 - Closed chain pendulum on ball or table top
 - AROM exercises up to 90° of elevation, provided there is good scapular control with this
 elevation
 - Axially loaded AROM exercises, which facilitate glenohumeral congruency and effectively decrease the intrinsic weight of the upper limb
- ♦ AVOID EXTERNAL ROTATION UNTIL THE FOURTH WEEK THEN BEGIN GENTLY

Intermediate (week4-8)

- ♦ Gently begin introducing active ER
- If necessary capsular stretching and joint mobilization can begin approximately week 6-8
- Move toward full AROM with quality scapulo-thoraco-humeral rhythm
- "Open the upper extremity chain" continuing to use functional movement patterns and complementary motion in the proximal segments
- ♦ Address all planes of motion
- ◆ Load the rotator cuff with punches in various planes and at various angles. (Begin in downward angles and progress to horizontal for maximal load. Overhead punches and presses requires normal scapular kinetics)
- ♦ Address internal rotation deficit—muscular and capsular
- Avoid 90° external rotation and 90° horizontal abduction posterior to the plane of the body
- ♦ With full AROM, good scapular control, and good RC strength, may begin introducing gentle plyometrics week 7-8. ALL 3 criteria must be met prior to introducing plyometric exercises.



EXAMPLE EXERCISES FOR FUNCTIONAL SHOULDER REHABILITATION

SCAPULAR CONTROL

When: Beginning of therapeutic exercise through the end of rehabilitation, may begin without glenohumeral motion or arm elevation, introduction of glenohumeral motion and arm elevation once indicated and scapular control increases

<u>Goals</u>: Facilitate scapular motion and scapular re-education, strengthen scapular musculature in functional movement patterns

<u>Sample Exercises</u>: Trunk diagonals, sternal lifts, shoulder dumps (incorporates glenohumeral elevation and external rotation), tubing fencing, dumbbell or tubing punch/pull, modified dumbbell "cleans"

CLOSED KINETIC CHAIN

When: Begin at the onset of therapeutic exercise and continue throughout the program

<u>Goals</u>: Stimulate pain-free co-contractions of the rotator cuff, scapular musculature independently and in coordination; promote glenohumeral compression and dynamic stabilization

<u>Sample Exercises</u>: Weight-shifting on a fixed hand, ball stabilization in appropriate plane and degree of elevation, various levels of push-ups, scapular PNF with UE fixed at 12/6 o'clock and 3/9 o'clock

AXIALLY LOADED EXERCISES

When: Glenohumeral translation or scapulohumeral coordination is determined to be the limiting factor in increasing AROM

<u>Goals</u>: Increase active arm elevation with appropriate rotator cuff and scapular stabilizer co-contractions, facilitation of weakest components of AROM to achieve appropriate, pain-free ROM, transition to active, open kinetic chain arm elevation

<u>Sample Exercises</u>: Table slides, ball rolling, wall slides, Pro-FitterTM (Fitter International, Calgary, Alberta, Canada)

INTEGRATED EXERCISES

When: After scapular control and AROM is at or approaching normal

Goals: Integrated strengthening of scapular, rotator cuff and trunk musculature