Lexington Clinic
ORTHOPEDICS – SPORTS MEDICINE

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GUIDELINES FOR SCAPULAR MUSCLE REATTACHMENT REHABILITATION

Each case can be very different depending on the goals of the patient, the age of the patient, the size of the repair, type of repair, etc. We follow these basic guidelines. Any physician-indicated precautions override these guidelines.

Post-Operative Week 1-4
Sling: 4 to 6 weeks post-operative

- Sleep in sling for 4-6 weeks
- Patient may perform bilateral scapular retraction while in sling
- Motion restrictions:
    - No humeral internal rotation for 4 weeks
    - No humeral abduction for 4 weeks
    - No forward flexion for 6 weeks

Post-Operative Week 6-8

- Exercises emphasize standing scapular motion, retraction, depression and scapular PNF with arm close to body
    - Permissible exercises: low row, sternal lift
    - Impermissible exercises: push-up plus, wall push-up, plank, wall walking with arm
- Use complementary trunk movement to facilitate scapular motion (flex and rotate away from involved side for protraction, extend and square or rotate toward involved side for retraction)
- No rotator cuff exercises
- Towel slides on a table as tolerated in frontal plane after 6-8 weeks
- Passive and Active-Assisted ROM of external rotation and extension with arm as close to body as possible

After 6 weeks (Week 1 of Physical Therapy):

- PROM, AAROM, progress to AROM
- CKC rotator cuff stabilization and scapular exercises, increasing arm elevation as tolerated i.e. table slides, physioball range of motion program
- Add tolerable arm motion to standing scapular motion exercises
- Facilitate active arm elevation through axial loading of the glenohumeral joint (patient pushes on a table or wall as he/she elevates in the desired plane)

Post-Operative Week 8-10

- Initiation of gentle mobilizations and capsular stretching, if indicated
    - ***NO thoracic mobilizations*** may be performed at any point during this rehabilitation as adverse responses may occur
- Gradual progression of above exercises

Post-Operative Week 10-14

- Exercises should progress toward functional activities as ROM and strength improve
- CKC chain rotator cuff strengthening with good scapular control such as wall wash exercises and humeral head depression exercises (inferior glide or CKC Codman's)
    - We prefer rotator cuff loading that is consistent with function, including scapular and trunk motion, rather than isolated exercise
- These include CKC punches at various (tolerable) heights and planes, and adding arm elevation, rotation and extension of the lever arm to the complementary scapular exercises
- Avoid impingement and rotator cuff referred pain throughout
- Avoid long lever movements such as classic open chain rotator cuff exercises
- Avoid exercises that place moderate levels of tension on the lower trapezius

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

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

Sample Exercises: 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

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

Sample Exercises: Weight-shifting on a fixed hand, ball stabilization in appropriate plane and degree of elevation, various levels of push-ups, active 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

Goals: 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

Sample Exercises: Table slides, ball rolling, wall slides, Pro-Fitter™ (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