GUIDELINES FOR AC JOINT REPAIR/RECONSTRUCTION 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.

**Week 1-4**

♦ Sling: 3 to 6 weeks post-operative
  - Sleep in sling for 3 weeks
  - Motion restrictions:
    - No humeral internal rotation for 3 weeks
    - No humeral abduction for 3 weeks
    - No active open kinetic chain forward flexion for 6 weeks
      - AAROM of forward flexion may begin at week 5 but kept between 60-75°
    - Exercises emphasizing standing scapular retraction, depression and scapular PNF with arm in a sling
      - Permissible exercises: low row, sternal lift, step-out (see attached exercise template)
    - Use complementary trunk movement to facilitate scapular motion (flex and rotate away from involved side for protraction, extend and rotate toward involved side for retraction)
    - No rotator cuff exercises
    - Towel slides on a table as tolerated in frontal plane after 3 weeks
    - PROM and AAROM of external rotation and extension with arm as close to body as possible

♦ After 3 weeks:
  - PROM, AAROM, progress to AROM
  - CKC rotator cuff stabilization and scapular exercises, increasing arm elevation as tolerated i.e. table slides (includes both flexion and abduction up to 90°)
  - 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 with scapular control and stability i.e. no overt winging or upper trapezius substitution)

♦ At 4 weeks, initiation of gentle mobilizations and capsular stretching, if indicated
  - These can become more aggressive at 6-8 weeks

**Week 4-8**

♦ Exercises should progress toward functional open kinetic chain 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
  - These include scaption, prone and standing horizontal abduction, prone ER, etc.
- Avoid exercises that place moderate levels of tension on the lower trapezius
  - These include prone flexion or abduction raises (T’s, I’s, and Y’s) unilaterally or bilaterally

**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, 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