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Arthroscopic Bankart Repair Protocol for Shoulder Instability

Stage I (0-4 weeks):

Key Goals:

- Protect the newly repaired shoulder.
- Allow for decreased inflammation and healing.
- Maintain elbow, wrist and hand function.
- Maintain scapular control.

1. Outcome measures:
   a. PSFS: Patient specific functional scale.
   b. Quick DASH: Quick disabilities of the arm, shoulder, and hand score.

2. Immobilizer use:
   a. The immobilizer will be placed on patient's shoulder in surgery. b. The patient may remove the immobilizer for dressing and hygiene. c. The patient should wear the immobilizer for four weeks.

3. Restrictions:
   a. No shoulder elevation or external rotation.
      i. The capsular repair is stressed with movement into external rotation. Since the repair is performed with the shoulder in a neutral position external rotation must be limited for six weeks following the repair.
   b. When arm is out of the immobilizer, forearm must be touching abdomen.

c. Acceleration of rehabilitation for “fast healers” may reduce results and lead to long-term problems.

4. Exercises:
   a. Pendulum exercises.
   b. Active assistive range of motion of the involved elbow, wrist and hand in the plane of the body. The patient may progress to active range of motion as comfort improves.

   c. Scapular control exercises (Immobilizer on):
   d. Core training(Immobilizer on):

Stage II (4-15 weeks):

Key Goals:

· Full active elevation at 12 weeks from surgery.
· Surgical shoulder external rotation of 80% of uninvolved shoulder. ·
Normal scapular mechanics 12 weeks from surgery.
   o Scapular mechanics should be evaluated on a regular basis.
· Normal scapular stabilizer, rotator cuff and core strength at 16 weeks from surgery.

1. Week 4:
   a. Brace use:
      i. Immobilizer will be used at this time while sleeping until six weeks post-op.
      ii. Sling is worn during the day for comfort. Wean as comfort improves.

   b. Range of motion:
      i. External rotation:

         1. Passive to active assistive to active range of motion as able.

         2. Limited to 20 degrees maximum until 6 weeks from surgery.
         3. No subscapularis or anterior shoulder stretching until 6 weeks from surgery.

      ii. Internal rotation:
         1. Passive to active assistive to active range of motion as able.
            a. Begin in supine with scapula stabilized, and

progress to other postures as tolerated.

iii. Flexion/Scaption/Abduction:

1. Passive to active assistive to active range of motion as able.

a. Supine with scapula stabilized.

iv. Gleno-humeral mobilizations:

1. No anterior glides until 10 weeks from surgical date.

c. Balance training:

d. Strengthening (4 weeks):

i. Isometric strengthening:

a. Internal/external rotation:

i. If open surgical procedure, NO internal rotation strengthening until six weeks post-op.

ii. Core training:

2. <u>Week 6:</u>

a. Immobilizer use at night can be discontinued.

b. Range of motion:

1. As tolerated no limits.

c. Strengthening:

i. Scapular stabilizer strengthening:

ii. Core training:

3. <u>Week 8:</u>

· **Warning: No soreness with the above rotator cuff strengthening.** ·
The program must be modified to avoid cuff aggravation.

a. Balance training:

b. Range of motion:

i. No anterior apprehension or impingement.

ii. Scapular mechanics need to be functioning properly and if not need to be addressed.

iii. Hip mobility:

c. Strengthening:

i. Scapular mechanics:

ii. Forearm strengthening:

iii. Rotator cuff strengthening:

iv. Core training

4. Week 12:

a. <u>Testing:</u>

i. Full pain free active range of motion for elevation and internal rotation.

ii. A 20 degree difference in shoulder external rotation is acceptable.

iii. Normal scapular mechanics.

iv. TROM is within 10 degrees of other side.

1. TROM should be within 5 degrees or less by 16 weeks.

v. IR difference is less than 20 degrees or 2 spinal levels.

vi. Squat screen (FMS):

vii. Hurdle step screen (FMS):

viii. Shoulder mobility screen (FMS):

ix. Hand held dynamometer:

1. 0 degrees with arm at side IR and ER.
2. Seated IR and ER at 90 degrees of abduction and 45 degrees of external rotation.
3. ER/IR=65%

Warning:

· **Any deficits in mobility, stability, or scapular mechanics need to be addressed now prior to beginning return to throw program at 20 weeks.**

b. Range of motion:

i. Any flexibility deficits need to be addressed before return to

program begins at 16 weeks.

1. See above testing.
2. **Begin external rotation/pectoral stretching.**

c. Strengthening:

i. Scapular stabilizer:
ii. Rotator cuff:
iii. Plyometric training
    i. Upper extremity.
    ii. Lower extremity.
iv. Core training:
v. Endurance training:

<u>Stage III (Weeks 20-26)</u>

Initiation of Interval Sport Program for Baseball, Tennis, and Golf:

· Return-to-sport activities after injury that include attention to the entire body. · A gradual progression of applied forces to lessen the chance of re-injury. · Proper warm-up and maintenance exercises.
· Proper biomechanics to minimize the chance of re-injury.
· Variability is based on each athlete's skill, level, goals and injury. · Program needs to be followed rigidly. Some athletes will try and rush through the plan.
- No skipping of steps is allowed.
- Patient must demonstrate successful completion of each step. · Program should be supplemented with a high-repetition, low intensity weight training program focusing on the posterior rotator cuff and scapular musculature.

· Outcome measures:
- PSFS: Patient specific functional scale.
- Quick Dash: Quick disabilities of the arm, shoulder and hand score.

1. Basic menu of program:
    a. Warm-up.
    b. Stretch.
    c. 1 set of each exercise prior to ISP.
    d. ISP.
    e. 2 sets of each exercise.
    f. Cryotherapy