



## Anterior Labrum Repair Protocol

### 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. 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 full-time for four weeks.

#### 2. 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.

#### 3. 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 (5-15 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.
  - Scapular mechanics should be evaluated on a regular basis.
- Normal scapular stabilizer, rotator cuff and core strength at 16 weeks from surgery.

**1. Weeks 5-6:**

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

- ii. Core training:

**2. Week 7:**

- 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. Week 8:**

- **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. Testing:
  - 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. ROM is within 10 degrees of other side.
  1. ROM should be within 5 degrees or less by 16 weeks.
- v. Int Rotation 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
    1. Upper extremity.
    2. Lower extremity.
  - iv. Core training:
  - v. Endurance training:

**Stage III (Weeks 20-26)**

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.