



## Latarjet Coracoid Transfer 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 for six 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 needs to stay away from the abdomen. The hand should remain with "thumb up" and in the plane of the brace.
- 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 internal rotation of 80% of uninjured 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 full-time for six weeks post-op.
- b. Range of motion:
  - i. Internal rotation:
    1. Passive only
    - 2. No active internal rotation for 6 weeks after surgery**
  - ii. External rotation:
    1. Passive to active assist – limited to 30 degrees
      - 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.
- c. Balance training:
- d. Strengthening (4 weeks):
  - i. Isometric shoulder strengthening.
  - ii. Core training.

**2. Weeks 7- 8:**

- **Warning: No soreness with rotator cuff strengthening.**
  - **The program must be modified to avoid cuff aggravation.**
- a. Balance training.

- b. Range of motion:
  - i. May begin active assist internal rotation and progress to active internal rotation.
  - ii. Progress external rotation. Active assist to active external rotation. Goal is symmetric external rotation by week 12.
  - iii. **Scapular mechanics need to be functioning properly and if not need to be addressed.**
  - iv. Hip mobility:
    - 1. Deficits should be addressed in preparation for eventual return to throw program.
- c. Strengthening:
  - i. Scapular mechanics.
    - 1. Lower and middle trapezius strengthening should be an integral part of the rehab program to assure proper scapular mechanics.
  - ii. Forearm strengthening.
  - iii. Rotator cuff strengthening.
  - iv. Core training.

### 3. Week 12:

- a. Testing:
  - i. Full pain free active range of motion for elevation and internal rotation.
  - ii. A 20 degree difference in shoulder internal 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. Squat screen.
  - vi. Hurdle step screen.
  - vii. Shoulder mobility screen.
  - viii. 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 sleeper stretch.**
  - c. Strengthening:
    - i. Scapular stabilizer.
    - ii. Rotator cuff.
    - iii. Plyometric training
      - i. Upper extremity.
      - ii. 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:

Thomas Sanders MD

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