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<u>Postoperative Rehabilitation Guidelines</u> <u>Coraco-Clavicular Ligament Reconstruction</u>

The following protocol is intended as a general guideline for physical therapist, athletic trainer, and patient after coracoclavicular ligament reconstruction. These guidelines are designed to facilitate the expedited and safe return to athletic or professional activity and is based on a review of the current scientific principles of shoulder rehabilitation. For the treating health care provider this protocol should not serve as a substitute for individualized clinical decision making during the patient's post-operative course following . It should rather take into consideration the individual's physical findings, progression, and possible post-operative limitations. If the therapist or patient requires assistance or encounters any postoperative complication they should consult with **the surgeon**.

Principles of Rehabilitation

Coracoclavicular Ligament Reconstruction is used to treat *painful* and *unstable* acromioclavicular (AC) joint following a high grade shoulder separation injury. This surgical reconstruction is fragile. Early active use of the arm is avoided in order to prevent stretching or disruption of the CA ligament reconstruction. The rehabilitation program is divided into three phases. Phase I comprises a period of four weeks of immobilization to promote healing. Phase II consists of shoulder range of motion and gradually progressive strengthening. Phase III focuses on the functional return back to sport and/or work activities.

Phase I (Weeks 1-6)

Clinical Goals

- ♦ Healing Phase, Shoulder immobilizer at all times except for exercises
- ♦ Limited Passive and pain-free ROM

Exercises

◆ This phase is strictly a protective phase and does not involve any rehabilitative exercise. The shoulder is immobilized but patients are allowed waist level elbow and hand-to-face activities at this time.

♦ Gentle Passive ROM can be initiated avoiding Flexion/abduction > 90 degrees, any internal rotation and external rotation >45 degrees

♦ Ice to prevent pain and swelling.

Phase II (Weeks 7-12)

Clinical Goals

♦ Full passive and active ROM

♦ Pain-free ADL's and light to medium job duties

Exercises

◆ The patient will begin AAROM exercises at 4 weeks and using the arm for light ADL's.

• AROM may be initiated at 6 weeks, but end-range flexion, abduction, and external rotation $> 90^{\circ}$ of abduction should not be forced.

Flexion and external rotation in neutral may be initiated gradually.

Closed Kinetic Chain exercises are preferred during the first 8 weeks

◆ Internal rotation behind the back should be avoided until 6 weeks and should progress cautiously avoiding pain.

• Cross-chest adduction should be avoided for 6 weeks and progress gently with concomitant SLAP repairs.

• Strengthening exercises with resistance are implemented at 10-12 weeks using theraband or light dumbells. Flexion and abduction strengthening should remain at or below 90° of elevation. External and internal rotation strengthening should remain in a neutral position.

♦ Isometric scapular retraction exercises (i.e. isometric low rows) are started at 6 weeks and progress to active scapular retraction at 12 weeks

♦ Resisted biceps strengthening should be avoided for 10 weeks with concomitant SLAP repairs

 \blacklozenge Ice to prevent pain and swelling.

Phase III (Weeks 13-24)

Clinical Goals

♦ Restore normal strength

♦ Return to unrestricted work or athletic activities

Exercises

 \blacklozenge The focus of this phase is on the functional return of the patient back to his or her prior

level of activity.

• The patient will be able to utilize gradually increasing weight with exercises. Strength exercises at or above 90° may be gradually implemented as long as they are pain free.

• Multilevel rowing exercises are initiated and resistance increased if performed painfree

♦ Aggressive strengthening exercises require full pain-free ROM

Ice to prevent pain and swelling

◆ Implementation of a sports specific functional progression is appropriate at this time:

Overhead athletes will begin their return to sport more toward the end of phase III. Gradually increasing IR exercises at 90 degrees of abduction and sport-specific motion patterns should be progressively integrated and performed without pain without pain and ROM limitation before return.

◆ The patient is discharged once they have full ROM, normal strength, and resumed full pain-free, activities. Return to sport should be coordinated with the surgeon.