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## **POSTSURGICAL REHABILITATION FOLLOWING ACROMIOCLAVICULAR JOINT RECONSTRUCTION**

### **Phase 1: Protection Phase (weeks 0-6)**

#### **Goals**

- Protect the surgical repair.
- Retard muscular atrophy.
- Decrease pain/inflammation.

#### **Frequency of in-office visits**

- 2 to 3 visits over first six weeks to monitor patient compliance and understanding

#### **Shoulder range of motion**

- None

#### **Elbow motion**

- Passive to active motion, progress as tolerated
  - 0-130°
  - Pronation to supination as tolerated
  - Support elbow with contralateral hand

**Shoulder droop with arm hanging unsupported is contraindicated.**

#### **Strengthening Exercises (begin at 10-14 days post-op)**

- Gentle isometrics
  - Flexion
  - Abduction
  - Extension
  - Internal rotation
  - External rotation (scapular plane)

#### **Criteria for progression to phase 2:**

- Minimal pain and tenderness
- Stable AC joint on clinical examination
- Good (grade 4/5) MMT of external and internal rotation and abduction

## **Phase 2: Intermediate Phase (weeks 6-10)**

### **Goals**

- Reestablish full nonpainful ROM
- Retard muscular atrophy
- Regain and improve muscular strength
- Normalize arthrokinematics
- Improve neuromuscular control of shoulder complex

### **Range of motion exercises**

- T-bar active-assisted ROM exercises
  - Flexion to tolerance
  - External and internal rotation (begin at 0° abduction, progress to 45° abduction, then to 90° abduction)
- Rope and pulley flexion
- Pendulum exercises
- Self-capsular stretches

### **Strengthening exercises**

- Isometrics
- External and internal rotation, abduction, extension, biceps, triceps
- Progress to isotonic strengthening (light resistance with dumbbells or equivalent)
  - Shoulder abduction
  - Shoulder extension
  - Shoulder external and internal rotation
  - Biceps and triceps
  - Scapular musculature
- Initiate neuromuscular control exercises (PNF)
- Initiate manual resistance
- Initiate upper extremity endurance exercises
- Rhythmic stabilization exercise for shoulder flexion-extension

### **No shoulder press or bench press or pectoralis deck or pullovers**

### **Decrease pain / inflammation**

- Ice, modalities prn

### **Criteria for Progression to Phase 3**

- Full nonpainful ROM
- No pain and tenderness
- Strength 70% of contralateral side

### **Phase 3: Dynamic strengthening phase (weeks 10-16)**

#### **Goals**

- Improve strength, power, and endurance
- Improve neuromuscular control and dynamic stability to the AC joint
- Prepare the athlete for overhead motion

#### **Strengthening exercises**

- Continue isotonic strengthening exercises
  - Initiate light bench press, shoulder press (progress weight slowly)
  - Continue with resistance exercises for:
    - Shoulder abduction
    - Shoulder external and internal rotation
    - Shoulder flexion
    - Latissimus dorsi (rowing, pull-downs)
    - Biceps and triceps
  - Initiate tubing PNF patterns
  - Initiate external and internal rotation at 90° abduction
  - Scapular strengthening (four directions)
    - Emphasis on scapular retractors, elevators
  - Neuromuscular control exercises for GH and scapulothoracic joints
    - Rhythmic stabilization
      - Shoulder flexion-extension
      - Shoulder external and internal rotation (90/90)
      - Shoulder abduction-adduction
      - PNF D2 patterns
      - Scapular retraction-protraction
      - Scapular elevation-depression
  - Program to plyometric upper extremity exercises
- Continue stretching to maintain mobility

#### **Criteria for progression to phase 4:**

- Full nonpainful ROM
- No pain or tenderness
- Isokinetic test that fulfills criteria (shoulder flexion-extension, abduction-adduction)
- Satisfactory clinical examination

### **Phase 4: Return to activity phase (weeks 16 – recovery)**

#### **Goal**

- Progressively increase activities to prepare patient/athlete to full functional return

**Exercises**

- Initiate interval sports program
- Continue all exercises listed in phase 3
- Progress resistance exercise levels and stretching

This protocol provides you with general guidelines for the patient undergoing surgical reconstruction of the acromioclavicular joint.

Specific changes in the program will be made by the physician as appropriate for the individual patient.

Questions regarding the progress of any specific patient are encouraged, and should be directed to Dr. Lervick at **952-944-2519**.

**REFERENCE:**

Clinical Orthopaedic Rehabilitation, 2<sup>nd</sup> edition. SB Brotzman, KE Wilk. Mosby 2003.