

# Acromioclavicular Joint Reconstruction Using Synthetic Material Accelerated Rehabilitation Protocol (for Athletes)

# PHASE I - MOTION PHASE (Weeks 0-2)

Goals: Initiate ROM exercises

Retard muscular atrophy Decrease pain/inflammation

#### Range of Motion Exercises:

- L-bar AAROM
  - Flexion to tolerance
  - ER/IR (begin at 45 degrees abduction, progress to 90 degrees abduction) motion to tolerance
- Rope and pulley scaption
- Pendulum exercises
- Self-capsular stretches

# Strengthening Exercises:

- Isometrics
  - ER, IR, Abd, Ext, Biceps, Triceps
  - \*Note No resisted shoulder flexion
- Initiate ER/IR with exercise tubing at 0 degrees abduction when pain free (usually week 2)

#### **Decrease Pain/Inflammation:**

- Ice, NSAIDS, modalities
- Ice applied directly over AC joint

#### PHASE II - INTERMEDIATE PHASE (Weeks 3-8)

Goals: Gradually regain full ROM

Regain and improve muscular strength

Normalize arthrokinematics

Improve neuromuscular control of shoulder complex

# Criteria to Progress to Phase II:

- Nearly full ROM
- 2. Minimal pain and tenderness
- 3. Stable AC joint on clinical exam
- 4. Good (4/5) MMT of ER/IR/Abd

#### Week 3

- Range of motion exercises
  - Continue AAROM with L-bar
  - Shoulder elevation to at least 160 degrees by week 4
  - ER/IR at 90 degrees abduction full ROM
- Strengthening exercises
  - Initiate isotonic strengthening (light resistance)
    - Shoulder abduction
    - Shoulder extension
    - Shoulder ER/IR tubing
    - Sidelying ER
    - Biceps/triceps

<sup>\*</sup>Note – Restrict horizontal Abduction/Adduction (often painful)

- Prone horizontal abduction
- Prone rowing
- Prone extension

\*Note – Restricted shoulder flexion prohibited (for 4 weeks)

- Initiate neuromuscular control exercises (PNF)
- Initiate manual resistance
- Continue use of modalities, ice as needed

#### Week 6

- Range of motion exercises
  - Continue stretching program
- Strengthening exercises
  - Continue all strengthening exercises listed above
  - Initiate light resistance shoulder flexion
  - Initiate upper extremity endurance exercises
  - Initiate light isotonic resistance progression
  - NO shoulder press or bench press or pect deck or pullovers
  - Rhythmic stabilization exercise for shoulder flexion/extension
  - Program all shoulder and scapular strengthening exercises

### PHASE III - DYNAMIC STRENGTHENING PHASE (Weeks 8-16)

Goals: Improve strength/power/endurance

Improve neuromuscular control/dynamic stability to the AC joint

Prepare athlete for overhead motion

# Criteria to Enter Phase III:

- 1. Full nonpainful ROM
- 2. No pain or tenderness
- 3. Strength 70% of contralateral side

# Strengthening Exercises:

- Continue isotonic strengthening exercises
  - Initiate light bench press, shoulder press (progress weight slowly)
  - Continue with resistance exercises for:
    - Shoulder abduction
    - Shoulder ER/IR
    - Shoulder flexion
    - Latissimus dorsi (rowing, pull-downs)
    - Biceps/triceps
  - Initiate tubing PNF patterns
  - Initiate ER/IR at 90 degrees abduction
  - Scapular strengthening (4 directions)
  - Emphasis on scapular retractors, elevators
  - Neuromuscular control exercises for glenohumeral and scapulothoracic joints
    - Rhythmic stabilization
      - Shoulder flexion/extension
      - Shoulder ER/IR (90/90)
      - Shoulder abduction/adduction
      - PNF D<sub>2</sub> patterns
      - Scapular retract/protract
      - Scapular elev/depress
  - Program to plyometric upper extremity exercises
- Continue stretching to maintain mobility

# PHASE IV - RETURN TO ACTIVITY PHASE (Week 16>)

Goals: Progressively increase activities to prepare patient/athlete to full functional return

# **Criteria to Progress to Phase IV:**

- 1. Full nonpainful ROM
- 2. No pain or tenderness
- 3. Isokinetic test that fulfills criteria (Shoulder F/E, Abd/Add)
- 4. Satisfactory clinical exam
- Initiate Interval Sports Program
- Continue all exercises listed in Phase III
- Progress resistance exercise levels and stretching

KW/JA 4/07

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