

Robert Kollmorgen DO

## **Acromioclavicular Sprain Rehabilitation Program**

### **Phase I - Control Inflammation** (1-2 days for Grade I sprain, 2-3 days for Grade II)

*Goals:*

Control Inflammation and Pain

Reduce Swelling

*Rehab:*

1) Cryotherapy

a: Ice for 20 minutes

2) Modalities

a: Interferential Stim (can be used with ice at the same time)

3) NSAIDS

a: Ibuprofen/Advil - 4 times a day for 3 days (only if no allergies)

### **Phase II - Restore Range of Motion** (2-4 days for Grade I sprain, 3-7 days for Grade II sprain)

*Goals:*

Passive and active range motion is within 80% of normal in the unaffected arm

Joint flexibility in affected limb is restored

Cardiovascular endurance is maintained at preinjury level

Range of motion exercises performed pain free

## Robert Kollmorgen DO

### *Rehab:*

#### 1) Heat Therapy

a: Hot pack for 20 minutes

#### 2) Modalities

a: Pulsed ultrasound for 5 minutes

#### 3) Flexibility Exercises

a: Hold involved arm across the chest at the involved elbow, pushing slightly posterior until a stretch is felt

b: Hold sides of a doorway with hand behind you. Let arms straighten as you lean forward. Repeat with hands in front of you as you lean backward.

#### 4) Codman's Exercises

\* Perform without free weights (pain-free)

a: Stand with body bent forward at the waist 90 degrees, or lie on your stomach on a mat with the involved arm dangling in front of you.

b: Stabilize the scapula with a belt by wrapping it around the upper body and scapula.

c: Between 60 and 90 degrees flexion or scaption, move the involved arm in a swinging motion,

going forwards and backwards, side to side, and in circles.

#### 5) Wall Crawls (Flexion and abduction)

a: Place hand on wall and have fingers crawl up the wall until end of range of motion. Repeat going down the wall.

Robert Kollmorgen DO

b: Start by facing a wall, repeat exercise again by facing sideways to the wall

6) Shoulder Wheel

a: Place hand on grip of shoulder wheel and move wheel around until maximal range of motion is reached. Repeat going the opposite way.

7) Pulley

a: Place hands on both ends of pulley and have the affected limb pull downward. Repeat again with unaffected limb pulling downward.

8) Cane Exercises

a: Shoulder flexion - hold cane with hands palm down at waist height.

Raise the wand overhead leading with the uninvolved arm until a stretch is felt in the involved shoulder.

b: Shoulder abduction - hold cane with involved arm palm up, uninvolved arm palm down. Push cane sideways and upward toward the involved side with the uninvolved arm until a stretch is felt in involved shoulder.

## Robert Kollmorgen DO

c: Shoulder adduction - reverse hand positions from the previous exercise.

Pull the cane toward uninvolved side until a stretch is felt in the involved shoulder.

d: Shoulder internal/external rotation - keep hands palms down on ends of cane at waist level. Move cane upward toward the head, then return to the waist level.

### 9) Cardiovascular Endurance

a: Bike for 20 minutes

### 10) Cryotherapy

a: Ice after for 20 minutes

**Phase III - Strength Training** (5-7 days for Grade I sprain, 7-14 days for Grade II sprain)

#### *Goals:*

Range of Motion and flexibility of affected arm equals unaffected arm

Muscular Strength is equal between affected and unaffected arm

Cardiovascular endurance maintained at preinjury level

Range of Motion and Strength Exercises performed without pain

Robert Kollmorgen DO

*Rehab:*

1) Heat Therapy/Flexibility

a: Continue heat and ultrasound therapy

b: Continue flexibility exercises

2) Codman's Exercises with Free Weights

\* Progress through free weights as tolerated (pain-free)

a: Stand with body bent forward at the waist 90 degrees, or lie on your stomach on a table with

the involved arm dangling in front of you.

b: Stabilize the scapula with a belt by wrapping it around the upper body and scapula.

c: Between 60 and 90 degrees flexion or scaption, move the involved arm in a swinging motion,

going forwards and backwards, side to side, and in circles.

3) Theraband

a: Flexion - Grip theraband in front of you with the elbow extended. Pull

## Robert Kollmorgen DO

theraband upward until maximal range of motion is reached and lower downward.

b: Extension - Start in same position as flexion. Pull theraband backward until maximal range of motion is reached and bring back to starting position.

c: Internal Rotation - Stand in front of theraband board with affected arm facing it. Rotate arm inward across body while gripping the unattached end of theraband.

d: External Rotation - Stand in front of theraband board with unaffected arm facing

it. Rotate arm outward away from the body while gripping the unattached end of theraband.

e: Abduction - Stand in front of codman with affected arm facing it. Start with arm across the body and pull away from side.

f: Adduction - Stand in front of codman with affected arm facing it. Grab the theraband and pull arm toward the buttocks.

g: Horizontal Abduction - Stand in front of theraband board with unaffected arm facing it. Bring shoulder up to 90 degrees of flexion so that it is parallel to

## Robert Kollmorgen DO

the floor. Pull arm across body toward the opposite shoulder.

h: Horizontal Adduction - Stand in front of theraband board with affected arm facing it. Bring shoulder to 90 degrees of flexion so that it is parallel to the floor. Pull arm across body towards the opposite shoulder.

i: As strength is gained, progress up to different colors of tubing.

#### 4) Proprioception (Cat Stretch-Starting Position)

a: Start in a non-weight bearing position (knees flexed) on a floor

b: As patient gains strength, incorporate the following progressions:

(1) Body movement - static (still) to dynamic (moving)

(2) Amount of arms involved - bilateral (2 arms) to unilateral (1 arm)

(3) Surface - stable (floor or wall) to unstable (single and multiplane boards)

c: Perform 3-5 stances, holding 15-20 seconds

#### 5) Open Kinetic Chain Exercises

## Robert Kollmorgen DO

a: Weight Training (Starting position - place weight in affected hand)

(1) Flexion: Bring it forward and towards the ceiling until maximal range of motion is reached. Lower downward.

(2) Extension: Bring weight backward towards the ceiling until maximal range of motion is reached. Lower downward.

(3) Abduction/Adduction: Raise weight to the side until maximal range of motion is reached. Lower downward and continue to lift towards the other side. Lower down to starting position.

(4) Horizontal Abduction/Horizontal Adduction: Lift weight up to 90 degrees of flexion. Bring the weight in front of you towards the other shoulder. Continue in the opposite direction towards the side until maximal range of motion is reached. Bring weight back to starting position.

(5) Internal/External Rotation: Flex elbow of effected limb and bring it close to the side of the body near the waist line. Bring weight in towards the stomach and continue into the opposite direction until maximal range of motion is reached.



**Robert Kollmorgen DO**

6) Closed Kinetic Chain Exercises

a: Wall Presses (push ups against a wall)

b: Standing Shoulder Flexion/Extension

(1) Stand with hands shoulder width apart on a chair. Rock forward over hands and back.

7) Cardiovascular Endurance

a: Bike or stairmaster for 30 minutes

8) Cryotherapy

a: Ice for 20 minutes

**Phase IV - Return to Activity** (approx 14 days)

*Goals:*

Normal function and sports specific patterns restored to injured extremity

Muscular strength, endurance, and power in affected arm is equal to unaffected arm

Normal coordination and balance

## Robert Kollmorgen DO

Cardiovascular endurance is equal to preinjury level

### 1) Heat therapy/modalities

a: Continue heat therapy, ultrasound, and flexibility

### 2) Strength exercises

a: Perform all exercises with minimal or no pain

### 3) Sports Specific Exercises

a: Baseball/softball - perform overhand throwing

b: Football - throw a spiral, catch a throw (depending on position)

c: Volleyball/tennis - perform a serve

d: Soccer - practice a throw in

e: Basketball - practice shooting and passing drills

### 4) Taping/Padding

a: Make an orthoplast pad to prevent further injury and hold in place with an ace wrap



Division of Orthopaedics  
Hip Preservation Surgery • Pelvis and Hip Reconstruction • Orthopaedic Sports Medicine

Robert Kollmorgen DO

5) Cryotherapy

a: Ice for 20 minutes