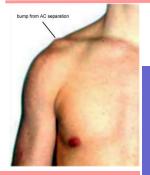


Acromioclavicular (AC) Sprains



Physical Therapy

Definition—This joint is composed of the bony ends of the clavicle and scapula in the shoulder. This is the smaller joint lying on top of the shoulder joint. This joint is unstable and easily injured if it undergoes outside forces.

Mechanism of Injury:

There are 6 different classifications of sprains that can occur in the AC joint. Types 1 & 2 most commonly occur from direct impact or falling on an outstretched arm. Types 3 & 4 usually occur from a direct blow forcing the acromion process of the shoulder blade downward, backward, and inward while the clavicle is pushed down against the rib cage Types 4, 5 & 6 have observable deformities and require surgery to fix the injury.

Depending on if your injury requires surgery or not, influences how the physical therapy is approached. If one does

not require surgery, meaning types 1, 2, & 3, then beginning therapy will be handled similarly. If one undergoes surgery or suffers from a Grade 2 or 3 sprain (according to pain), there is a period of immobilization prior to beginning therapy. Returning one's shoulder to normal ranges of motion, limiting swelling and pain, and encouraging normal activities of daily living is our first goal. This can be done by:

Rows - The act of pulling arms backwards and contracting muscles between shoulder blades can be done with tubing secured at waist level. Start with both arms extended forward and pull back in a rowing fashion against the tubing.

Houghstons – #1 - Begin laying on stomach with arm hanging off table.

- Place arm just past eye level with elbow straight and thumb up. Gently lift thumb approx. 6-8 inches towards ceiling.
- Hold briefly and return to starting position as shown.
- #2 Repeat with arm at shoulder level, elbow straight and palm down.
- #3 Repeat with arm at hip level, elbow straight and palm down

T,Y,I's – With arms out to the sides forming either a T, Y or I shape, this exercise focuses on tightening postural muscles to help strengthen muscles around the shoulder joint.

Once one has progressed adequately, more intensive therapy may be introduced to encourage strengthening of the muscles surrounding the AC joint. This can be done with:

Push Up with a Plus -

- Begin with both hands on wall or on a sturdy table.
- Lower yourself into a normal push up position then push back up. With your arms straight, roll your shoulders

forward into the "plus" position, slightly arching your back.

• Slowly return to starting position

Dynamic Hug - The theraband is attached at shoulder height behind you and is in both hands. Pull the band forward and slightly downward in a hugging type motion. Hold 3 seconds then repeat. This tightens chest muscles to further protect the AC joint

Prone Rows - Lie face down on your bed with your arms hanging over the edge of your bed. Your elbow is bent to 90 degrees. Keep your shoulder blade set & slowly raise your arm in a comfortable range of motion upward so that you are rowing. Hold 3 seconds then lower your arm. Progress to light weights (1-3 lb.) if you can do 30 without pain.

*Note: One may not progress to more demanding exercises until his or her physical therapist and/or athletic trainer allow it. Progressing oneself without the PT's or AT's permission may cause more damage to the joint and delay healing.

Criteria for Return to Sports and/or Work:

- Full range of motion and strength should be attained
- No pain or tenderness
- Patient should be able to complete his or her physical therapist's dynamic activities successfully Return to demanding activities ranges from 2 weeks to months depending on the extent of the injury.

Works Cited

- Prentice, W. E. (2011). Rehabilitation Techniques for Sports Medicine and Athletic Training (5th ed.). Chapel Hill, NC: McGraw Hill.
- Starkey, C., Brown, S. D., & Ryan, J. (2010). *Examination of orthopedic and athletic injuries* (3rd ed., pp. 892 893). Philadelphia, PA: F.A. Davis.