The Physio Movement

AC JOINT INJURY

WHAT IS AN AC SPRAIN?

The AC stands for the acromioclavicular (AC) joint. The joint joins your collarbone to your shoulder blade. The AC joint has 4 ligaments, which provide stability to the joint, when any of these ligaments tear an AC sprain is the resulting injury.

INJURY DESCRIPTION:

Sprains are the most common injury occurring at the AC joint, typically in contact sports or as a result of a traumatic fall. The joint can also be fractured with sufficient load or be affected by degenerative arthritis in older populations.

AC injuries are graded from 1-5:

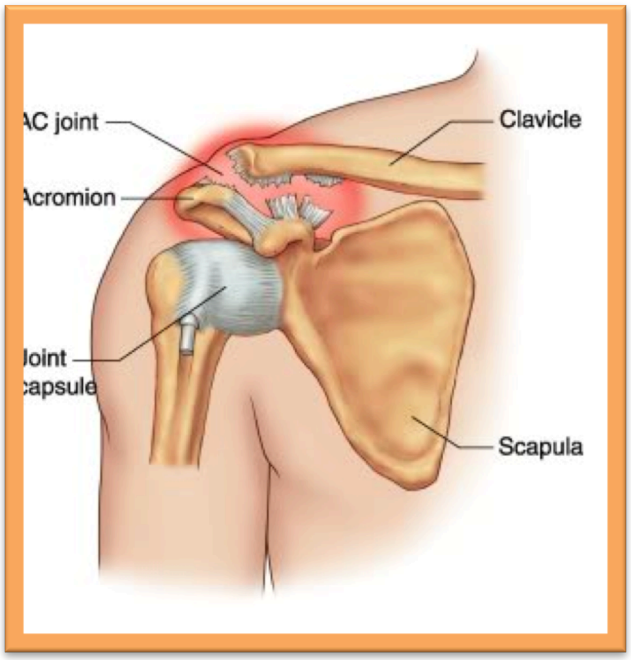
- Grade 1: Minor or small tear to the ligament, joint is stable
- Grade 2: Moderate or partial tear to the ligament, minor joint instability
- Grade 3: Severe or full thickness tear to the ligaments, unstable joint, marked step deformity*
- Grade 4: Complete ligament rupture, joint dislocation, marked step deformity, may require surgery.
- Grade 5: Complete ligament rupture, joint dislocation, severe step deformity, may require surgery.

MECHANISM OF INJURY:

An AC injury is usually the result of a fall onto an outstretched arm or the point of the shoulder. The injury is also common in collisions during contact sports. Depending on the force and more a fracture to the collarbone can occur.

SIGNS AND SYMPTOMS:

- Immediate swelling and pain
- Audible pop or crack at the time of injury
- Pain at rest, raising arm overhead or across body and during weight bearing
- Step deformity at point of shoulder



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DIAGNOSIS:

A good history can direct diagnosis. Observation of a step deformity* is an obvious sign of joint instability in grade III-V injuries. In grade I-II injuries tenderness over the joint and pain reaching across to the opposite shoulder are common indicators of an AC injury. If joint instability is suspected or there is a visible step deformity* an X ray is often required to exclude any fractures.

* step deformity = visibly raised point of the shoulder where the collar bone and shoulder blade has separated due to a ligament tear.

PHYSIO TREATMENT OPTIONS:

- Massage
- Ice
- Dry needling
- Joint mobilization/manipulation
- Taping and bracing
- Education
- Exercise prescription (shoulder strengthening and thoracic mobility)
- Biomechanical analysis and correction

FURTHER TREATMENT OPTIONS:

Grade IV-V injuries may require a surgical opinion in regards to the need to stabilise the joint.

PROGNOSIS / RETURN TO SPORT:

Grade I: 1-2 weeks

Grade II-III: 4-6 weeks

Grade IV-V: 8-12 weeks

Note if surgery is required: 4-6 months