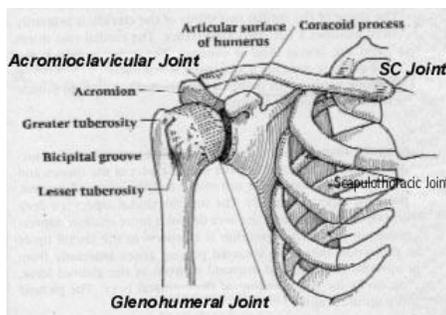


AC JOINT SEPARATIONS

BY: STEPHANIE HIGGINS BHSc, MPT
REGISTERED PHYSIOTHERAPIST

The **acromion clavicular joint** is the joint between the collarbone (the clavicle) and the shoulder blade (the acromion process of the scapula). An **Acromion Clavicular (AC) Joint Separation** is when the ligaments attaching the collarbone and the shoulder blade become sprained and/or torn. It is often referred to as a separated shoulder. This should not be confused with a **subluxation or dislocation of the glenohumeral (GH) joint**. A subluxation or dislocation of the GH joint occurs when the bone of the upper arm (the humerus) comes out of its bony socket in the shoulder blade.



The acromion process forms a high bony bump that can often be seen along the top of the shoulder. It forms the AC joint with the collarbone through the acromioclavicular (AC) ligament. The collarbone is also attached to another bony attachment on the shoulder blade through the coracoclavicular (CC) ligament. This attachment can also play an important role in AC joint separations.

There are **six grades** to determine the amount of damage that has been sustained:

A **Grade 1** AC joint separation is a simple sprain to the AC joint. In a **Grade 2** AC joint separation, the AC ligament is completely torn. With a

Grade 3 AC joint separation, both the AC and CC ligaments are completely torn which often results in the collarbone popping up since it is no longer properly attached. From **Grade 4-6**, the grade is determined by the amount and direction of the displacement of the collarbone from the shoulder blade.

The main **cause** of an AC joint separation is a fall or a sharp blow that causes the collarbone to be forced away from the shoulder blade. It is often a sports injury that can occur in contact sports such as **football, hockey, rugby and wrestling**. For example, if a hockey player is checked into the boards and hits the end of their shoulder, it can drive the shoulder back and force the collarbone forward.

Signs and symptoms of an AC joint separation include:

- **Localized pain** over the end of the collarbone and on top of the shoulder
- Swelling
- Depending on the severity of the injury, a **bump** or “**step deformity**” may appear where the collarbone attaches to the shoulder blade
- Pain with moving the shoulder, especially trying to raise one’s arms overhead

During the early stages of managing an AC joint separation, the basic rules of sports injury apply. **Rest, ice and support** are important to help the swelling subside and ease the pain. Having the arm supported in a sling for a couple of weeks may be necessary. Taping of the joint can also be helpful to support it.

The most important part of recovery following an AC joint separation is

making sure there is no loss in shoulder mobility. Once the pain has subsided enough for the arm to be moved without much pain, there are **stretches and strengthening exercises** that should be done. Stretching and moving the arm through a **pain-free range of motion** helps maintain the mobility in the arm and shoulder blade. Strengthening exercises are important to make sure the muscles around the AC joint are strong enough to protect it and decrease the risk of future injury.

Treatment for grade 1-3 AC joint separations are generally conservative (ie. physiotherapy, athletic therapy and chiropractic care). The more severe grades of injury may require surgical intervention.



Stephanie Wong, BHSc, MPT Registered Physiotherapist (Kitchener)

Stephanie graduated the University of Western Ontario, Master of Physical Therapy in 2009. Prior to this, she completed a 4 year Honors Specialization in Health Science with Biology also, from the University of Western Ontario in 2007. Since completing her Masters, Stephanie continues to further her post graduate education pursuits with a strong interest in manual therapy, sports physiotherapy and acupuncture.

Stephanie is a Kitchener native who has always had a passion for sports and physical activity. She has participated in many competitive sports throughout her life and continues to promote the importance of health and physical fitness. In her spare time, Stephanie is an avid Ultimate (Frisbee) player and has competed in the sport at the regional, provincial and national level.