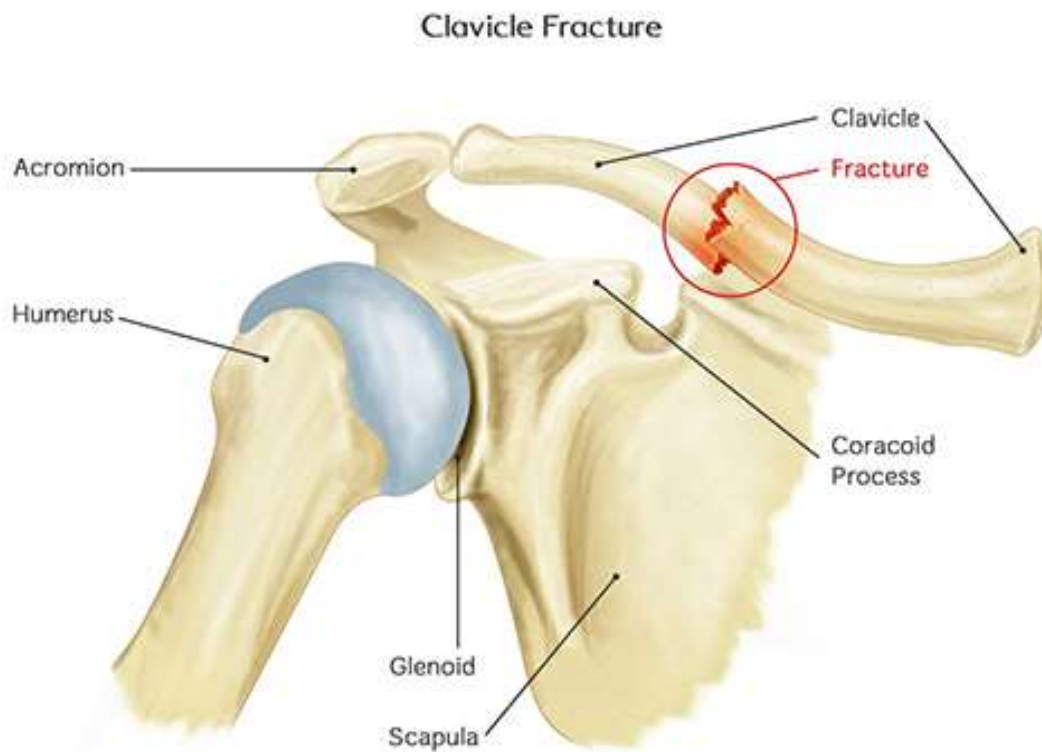


Clavicle Fractures

Dr Alan Dao

FRACS (Ortho), FA (Orth) A, MBBS, BaAppSc (Phty)

www.mysportsjoints.com.au

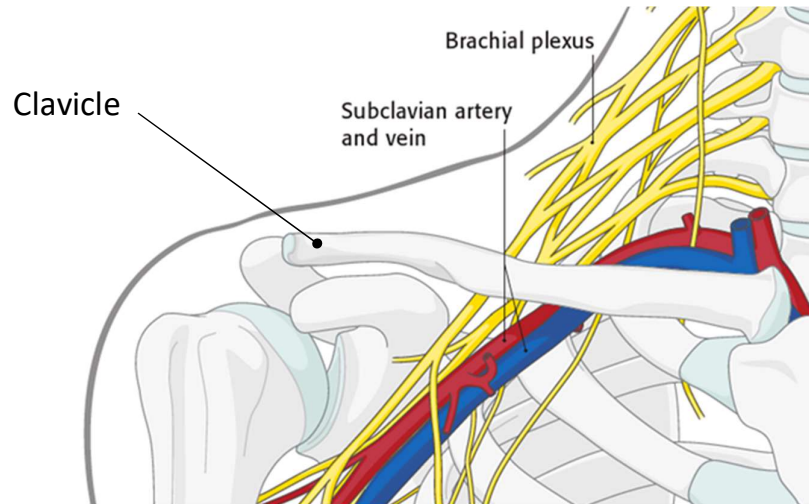


Suite 103, 68 Eldridge Rd, Bankstown NSW 2200
Suite 11, Level 7 POW Private Hospital, Randwick NSW 2031
Suite 209, Level 2, Strathfield Plaza Office, 11 The Boulevard Strathfield NSW 2153
Phone: (02) 8078 0633
Fax: (02) 8080 4344
Email: info@dralandao.com.au

Anatomy/Description

Your clavicle is the bone between the ribcage (sternum) and the shoulder blade (scapula) and its primary function is to connect the arm to the body. The clavicle is commonly referred to as the collar-bone. Your clavicle sits just above several important nerves and blood vessels, but thankfully these arrangements are often not affected when the clavicle is injured.

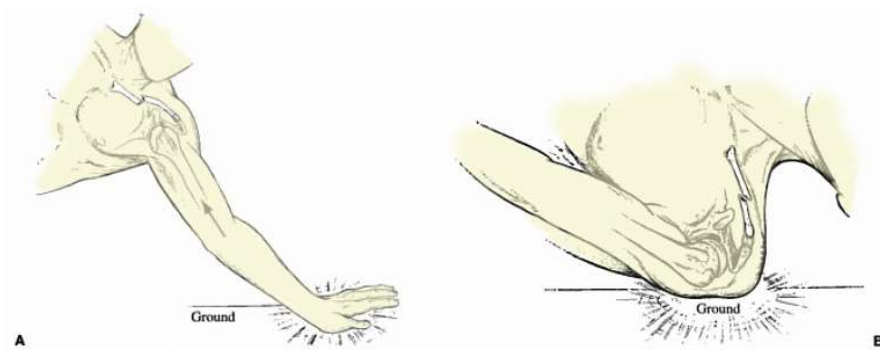
A broken clavicle is a common fracture that accounts for approximately 5% of adult fractures, this fracture can be very painful and make it quite difficult to move your arm.



What Causes a Clavicle Fracture?

Clavicle fractures occur in people of all ages, most fractures occur in the middle section - the shaft of the bone, where it is weakest. Though some fractures may occur closer to the scapula or sternum.

The most common cause of clavicle fractures is a fall onto an outstretched arm, or a direct blow to the shoulder, such as falling off a pushbike, that produces enough pressure on the bone that it snaps.



Types of Fractures

A fracture can be either open or closed. An open fracture means that the fractured bones have broken through the skin, where a closed fracture refers to a fracture with intact skin. The bones can then either break into many pieces which is called a 'comminuted fracture' or they may simply be broken in two. A displaced fracture is where the bones have moved out of alignment. Clavicle fractures generally occur in the middle third segment of the bone. Sometimes they can occur towards the scapula end, or the Acromioclavicular joint (ACJ). These fractures typically have a higher rate of displacement and non-union.

Symptoms

- Pain and discomfort
- Weakness and Inability to lift the arm
- Bruising, swelling or the formation of a bump over the collarbone
- A grinding sensation when lifting the arm

Surgical Treatment

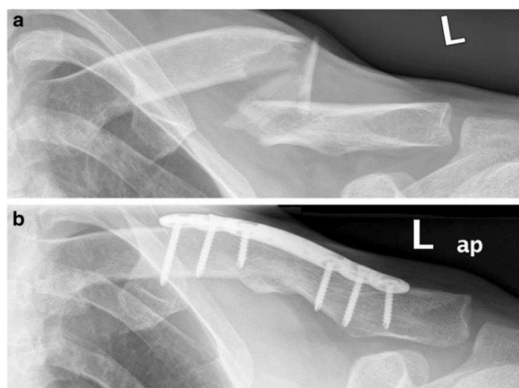
Not all clavicle fractures require surgery, some can be treated using a sling which is designed to immobilize the arm and shoulder temporarily whilst the bone heals. However this treatment is only suitable for fractures where the bones have not moved out of alignment.

The initial non-surgical treatment approaches include:

- A sling or arm support
- Medication to help ease the pain and discomfort
- Exercise therapy - It is important to maintain some level of appropriate movement to avoid stiffness and to help regain muscle strength once the bone has healed

For displaced fractures surgery may be required to realign the bones to their original anatomical position. This is usually done by using plates and screws. The procedure is called an open reduction and internal fixation (ORIF) of the clavicle. Dr Dao makes an incision approximately 10cm in length and using sterile instruments is able to manipulate and reduce the fractured bone back into alignment. He then fixes the bones in place using a carefully selected plate and measures the screws accordingly. Flouroscopy (operating theatre xrays) will be used to check the alignment and screw lengths. The wound will be closed with skin stitches and small adhesive dressings.

An ice pack is often applied in recovery to help defuse swelling and ease pain. Your arm will be placed in a sling or shoulder immobilizer.



It is important to note that it is normal to experience some numbness just underneath the site of the incision due to the close proximity of certain skin nerves. In the long run most people do not experience discomfort around the incision site however some may experience irritation from backpack straps or seatbelts, if this is the case the plates and screws can be removed once the bone has completely healed.

You will be prescribed medication for the first few days post-surgery to help with the pain and discomfort temporarily. You will also receive a gentle exercise therapy plan that can be done at home to encourage rehabilitation and return to normal activities.

Recovery and Follow Up After Surgery

After your procedure it will take several months for your clavicle to heal completely, it usually takes up to 3 months for most people to return to their normal activities, however this is dependent on many factors, such as if you smoke or are a diabetic, healing for these people may take longer.

You will be required to make a post-operative follow up appointment with Dr Dao at 2 weeks after surgery where Dr Dao will assess your wound and remove the stitches. You will then be required to make a second post-operative follow up appointment with Dr Dao at 6 to 8 weeks post procedure. Dr Dao will advise you of some gentle exercises to perform in order to prevent stiffness and promote rehabilitation.

Frequently Asked Questions

Q: Will the fracture heal by itself?

A. Most clavicle fractures can be treated with immobilization but some more severe fractures require surgical intervention, it will depend on the severity of your fracture as to what approach is most beneficial, Dr Dao will discuss this with you.

Q: Will I need surgery to repair the fracture?

A. Less severe fractures may benefit from temporary immobilization and more complicated fractures will require surgical reduction and fixation.

Q. Is there any risks associated with the surgery?

A. All surgery has risks. Dr. Dao will discuss this with you at your consultation should you require surgery, the risks include, but are not limited to;

- Anaesthetic complications
- Wound infection or slow healing
- Pain
- Blood clots or bleeding
- Injury to nerves or blood vessels
- Malunion: bones healing in the wrong position or Non-union: fracture not healing
- Hardware irritation requiring removal at a later stage



Q. Will the pain and discomfort at my collar-bone resolve?

A. Yes the pain and discomfort should resolve, however it is important to allow several months for the healing process.

Q. What do I do if there is severe pain, discharge, increased swelling, worsening flexibility, inability to move the arm or any urgent concerns following surgery?

A. During business hours, please contact the rooms on 8078 0633 or outside business hours please attend your local emergency department.