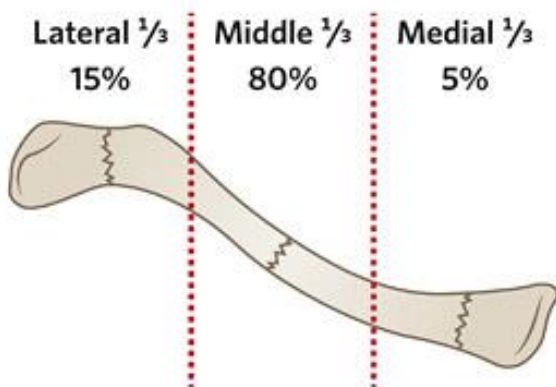


What is it?

The clavicle (collarbone) is the prominent bone on your upper chest which connects your sternum to your shoulder. A fractured clavicle occurs when the force being transmitted through the bone is too much for it to withstand. Most people have either fallen onto an outstretched arm or onto the point of their shoulder. Patients experience moderate to high levels of pain and inability to move their arm.

There are three main areas of the clavicle which can be fractured. The middle third is the most common area to be fractured (4). Injuries can also occur at the lateral end (AC joint) or medial end (SC joint).



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Things to watch out for!

Pins and needles, coldness, pale skin in your hand or arm as this could mean that in addition to the fracture, the injury has affected surrounding nerves or blood vessels and require urgent medical attention.

How is it managed?

Conservative (or non-operative) management is successful for most collarbone fractures (1). This arm is placed in a sling which supports and immobilizes the fracture site so that it can heal.

There are a number of different types of slings, which are all roughly as effective as one another. These include; collar and cuff, broad arm sling and the figure of 8 brace (1).

Surgical intervention may be required when there is;

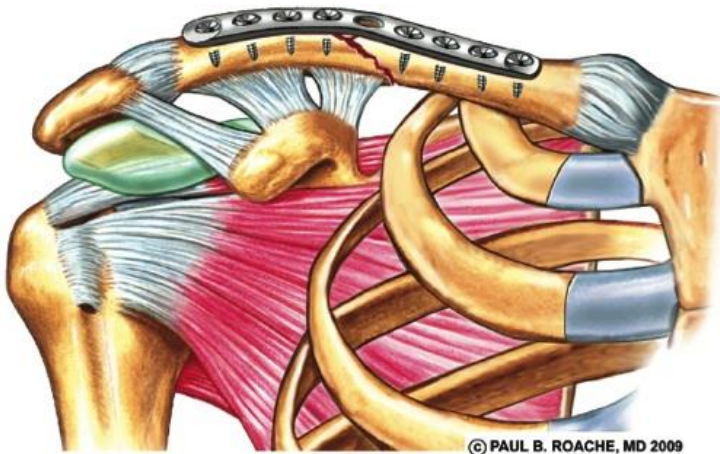
- ✦ Neurovascular involvement (2) (damage to nerves or blood vessels).
- ✦ A large overlap (>2cm) of the two fractured pieces of bone(4).
- ✦ When the bone has protruded through the skin or there is significant 'tenting' (2).
- ✦ Fractures involving the lateral and medial third of the clavicle with significant displacement (2).
- ✦ Failure of the bones to heal with conservative management (2).

How long will it take to heal?

Conservative management usually involves a period of immobilization of 4-6 weeks. The exact timeframe depends on your age, fracture location, degree of displacement, activity profile and general health. The younger the patient, the quicker the bones may heal (3).

Once the bone has healed, resumption of heavier physical activity is allowed; it may take another 4-6 weeks to return to high load tasks or contact sports.

Surgical management can result in a quicker recovery because it ensures excellent alignment and strong stabilisation of the fracture. Post-operative patients still require a sling however the timeframe varies according to surgeon preference and fracture type. Once out of the sling you will be able to gradually increase your activity and lifting tolerances over a number of weeks.



CLAVICULAR REPAIR

Will I need to see a physiotherapist?

Conservative management – Your treating doctor will advise regarding rehabilitation needs and timelines. It's important to be aware that while a sling is necessary for fracture healing, prolonged immobilisation can cause pain and stiffness in your neck, upper back, shoulder, elbow and wrist.

A physiotherapist can provide advice, exercises and hands-on treatment to resolve these issues plus a pathway to help you safely return to work or sport.

Surgical management – Following your operation you will need to restore your range of movement and strength as quickly and safely as possible within the boundaries of your surgeons' preferred rehabilitation protocol. A physiotherapist can guide you along this pathway. As your capacity increases your treatment program will include higher-level work, recreational or sport-specific exercises and training to rehabilitate your muscles and shoulder function to enable a return to your pre-injury level of activity.

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2. Hosalkar, H. S., Parkh, G., Bittersohl, B. (2013). Surgical fixation of displaced clavicle fracture in adolescents. *Orthopaedic reviews*, 5, e29, 124-127.
3. Lenza, M., Belloti, J. C., Andriolo, R. B., Gomes Dos Santos, J. B., Faloppa, F. (2009). Conservative interventions for treating middle third clavicle fractures in adolescents and adults. *Cochrane database of systematic reviews* (online), 2: CD007121.
4. Thyagarajan, S. D., Day, M., Dent, C., Williams, R., Evans, R. (2009). Treatment of midshaft clavicle fractures: A comparative study. *International journal of shoulder surgery*, 3(2), 23-27.

Images:
Clavicle:

http://www.rch.org.au/clinicalguide/guideline_index/fractures/Clavicle_fractures_Emergency_Department/#1

Surgical Fixation:

<http://www.shouldereducation.com/clavicle-fractures-collarbone-fractures/>