

Clavicle Fracture



Clavicle fractures are fairly common—one out of every twenty adult fractures involves the clavicle. Why is this main bone of the shoulder so vulnerable? And what happens after it breaks? Read on to find out!

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The clavicle is the collarbone—a key structure connecting the breastplate to the shoulder blade and is at the center of some of your most important body motions. It absorbs force from many directions, so it is one of the most easily fractured bones in your body.

Symptoms

A clavicle fracture can cause:

- » Major pain radiating from the site if you move your arm
- » Numbness, tingling, and weakness near the fracture and as far down as the hand
- » A break in the skin where a piece of the clavicle has been forced upward

Causes

A substantial jolt to the shoulder or arm will put strain on the clavicle and sometimes cause a fracture. Common causes may include falling off a bicycle, a collision during sports, or slipping and falling on the ice onto the side of the shoulder.

Diagnosis

In all cases, you will want to get medical attention without delay. The first step in diagnosis is an x-ray to confirm the fracture and assess the extent of the injury. If you experience numbness and tingling in your hand, or discoloration and swelling of the hand and arm, this may be a medical emergency and needs to be evaluated urgently.

Nonsurgical treatment options

The good news is that surgery is often not needed, with more than 90% of cases resolving without

surgery. In many cases, treatment starts with using a sling or special splint to minimize movement and allow time for your body to heal the fracture on its own.

If the fracture has not healed on its own after three months, surgery may be considered. Also, if the fracture is displaced more than 2 cm or there is a spike of bone that has rotated perpendicular to the clavicle, surgical fixation is likely the best option.

How surgery is performed

An open reduction and internal fixation (ORIF) with plate and screws can be performed to treat a clavicle fracture. If this surgery is indicated, a plate can be inserted into the damaged area and attached to the bone with screws. A bone graft may also be necessary, depending on the nature of the fracture.

The surgical procedure restores the integrity of the clavicle and reduces or entirely eliminates the “bump” sometimes caused by a misaligned clavicle bone. However, some patients will be disappointed by being able to feel the plate and screws under the skin. One out of four patients will request to have the plate and screws removed, but they must wait until one year after the surgery.

If surgical fixation is necessary in an athlete who participates in a collision sport, it is recommended they keep the plate and screws until they have completed their sports career.

Recovery time

Recovery will take anywhere from six weeks to four months, depending on the age and severity of the fracture. During this period, Dr. Romeo recommends applying ice packs several times a day to reduce swelling and ease pain. You may also be prescribed pain medication and given specific advice on ways to arrange your daily routine to promote healing (e.g., sleeping in an upright position).

As the pain begins to subside, you will need to begin light exercises to prevent complications. Without adequate movement, the shoulder could develop restricted range-of-motion conditions, such as frozen shoulder.

Results

Most clavicle fractures will heal completely by four to six months, at which point patients usually regain full range of motion and are able to return to their normal activities with no limitations.



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FAQs

Do all patients with clavicle fractures heal at the same rate?

No. It can take several months for the clavicle bone to fully heal with and without surgery. The healing process might take longer for patients who smoke or are diabetic.

Will I get back to my sport or work faster if I treat it with surgery?

The average time to return back without surgery is three months and can take longer. Treating a clavicle fracture with open reduction and internal fixation is associated with a return to play at six to eight weeks.

Want to learn more? Find relevant videos, animations, and research material related to this procedure at anthonyromeo.md.com. →



For more information about causes and treatment of clavicle fractures and other injuries to the collarbone, please request an appointment with experienced Chicago orthopaedic surgeon, Dr. Anthony Romeo.

Please visit our website to find out how to schedule your appointment.