

Clavicle Fracture (Broken Collarbone)

A broken collarbone is also known as a clavicle fracture. This is a very common fracture that occurs in people of all ages.

Anatomy

The collarbone (clavicle) is located between the ribcage (sternum) and the shoulder blade (scapula), and it connects the arm to the body. The clavicle lies above several important nerves and blood vessels.

However, these vital structures are rarely injured when the clavicle breaks, even though the bone ends can shift when they are fractured. **Description**

The clavicle is a long bone and most breaks occur in the middle of it. Occasionally, the bone will break where it attaches at the ribcage or shoulder blade.

Cause

Clavicle fractures are often caused by a direct blow to the shoulder.

This can happen during a fall onto the shoulder or a car collision. A fall onto an outstretched arm can also cause a clavicle fracture. In babies, these fractures can occur during the passage through the birth canal.

Symptoms

Clavicle fractures can be very painful and may make it hard to move your arm.

Additional symptoms include:

- Sagging shoulder (down and forward)
- Inability to lift the arm because of pain
- A grinding sensation if an attempt is made to raise the arm
- A deformity or "bump" over the break
- Bruising, swelling, and/or tenderness over the collarbone

Nonsurgical Treatment

If the broken ends of the bones have not shifted out of place and line up correctly, you may not need surgery. Broken collarbones can heal without surgery.

Arm Support

A simple arm sling or figure-of-eight wrap is usually used for comfort immediately after the break.

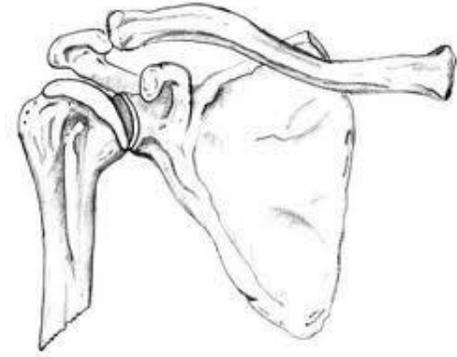
These are worn to support your arm and help keep it in position while it heals. **Medication**

Pain medication, including acetaminophen, can help relieve pain as the fracture heals.

Physical Therapy

While you are wearing the sling, you will likely lose muscle strength in your shoulder. Once your bone begins to heal, the pain will decrease and your doctor may start gentle shoulder and elbow exercises. These exercises will help prevent stiffness and weakness. More strenuous exercises can gradually be started once the fracture is completely healed. **Doctor Follow-Up**

You will need to see your doctor regularly until your fracture heals. He or she will examine you and take x-rays to make sure the bone is healing in good position. After the bone has healed, you will be able to gradually return to your normal activities.



Complications

The fracture can move out of place before it heals. It is important to follow up with your doctor as scheduled to make sure the bone stays in position.

If the fracture fragments do move out of place and the bones heal in that position, it is called a "Malunion." Treatment for this is determined by how far out of place the bones are and how much this affects your arm movement.

A large bump over the fracture site may develop as the fracture heals. This usually gets smaller over time, but a small bump may remain permanently.

Surgical Treatment

If your bones are out of place (displaced), your doctor may recommend surgery. Surgery can align the bones exactly and hold them in good position while they heal. This can improve shoulder strength when you have recovered.

Plates and Screws

During this operation, the bone fragments are first repositioned into their normal alignment, and then held in place with special screws and/or by attaching metal plates to the outer surface of the bone. After surgery, you may notice a small patch of numb skin below the incision. This numbness will become less noticeable with time. Because there is not a lot of fat over the collarbone, you may be able to feel the plate through your skin.

Plates and screws are usually not removed after the bone has healed, unless they are causing discomfort. Problems with the hardware are not common, but sometimes, seatbelts and backpacks can irritate the collarbone area. If this happens, the hardware can be removed after the fracture has healed.

Pins

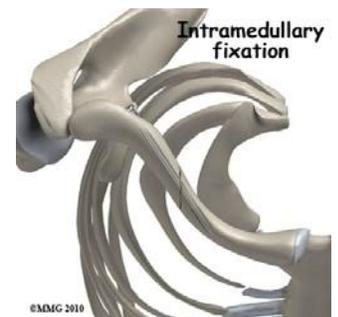
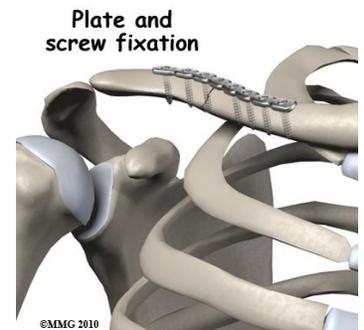
Pins are also used to hold the fracture in good position after the bone ends have been put back in place. The incisions for pin placement are usually smaller than those used for plates. Pins often irritate the skin where they have been inserted and are usually removed once the fracture has healed. **Rehabilitation**

Specific exercises will help restore movement and strengthen your shoulder. Your doctor may provide you with a home therapy plan or suggest that you work with a physical therapist. Therapy programs typically start with gentle motion exercises. Your doctor will gradually add strengthening exercises to your program as your fracture heals.

Outcome

Whether your treatment involves surgery or not, it can take several months for your collarbone to heal. It may take longer in diabetics or people who smoke or chew tobacco. Most people return to regular activities within 3 months of their injury. Your doctor will tell you when your injury is stable enough to do so. Returning to regular activities or lifting with your arm before your doctor advises may cause your fracture fragments to move or your hardware to break. This may require you to start your treatment from the beginning.

Once your fracture has completely healed, you can safely return to sports activities.





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SURGERY TO REPAIR FRACTURED CLAVICLE

PREOPERATIVE INSTRUCTIONS

Schedule surgery with the secretary in the doctor's office.

Within one month before surgery

- * Make an appointment for a **preoperative office** visit regarding surgery
- * A history and physical examination will be done
- * Receive instructions
- * Complete blood count (CBC)
- * Electrocardiogram (EKG) if over the age of 40

Within several days before surgery

- * Wash the shoulder and area well
- * Be careful of the skin to avoid sunburn, poison ivy, etc.

The day before surgery

Stoughton Hospital surgical staff will call ahead of time to let you know where and when to arrive.

*****Have nothing to eat or drink after midnight the night before your surgery*****

If you have any questions please call our clinic at 608-231-3410



SURGERY TO REPAIR FRACTURED CLAVICLE

Phase One: the first week after surgery

GOALS:

1. Control pain and swelling
2. Protect the clavicle fracture repair
3. Protect wound healing
4. Begin early shoulder motion

ACTIVITIES:

Immediately After Surgery

1. After surgery you will be taken to the recovery room room, where your family can meet you. You will have a **slings** on your operated arm. Rarely, an **abduction pillow** is needed to hold the arm up in the air away from the body.
2. You should get out of bed and move around as much as you can.
3. When lying in bed, elevate the head of your bed and put a small pillow under your arm to hold it away from your body.
4. Apply cold packs to the operated shoulder to reduce pain and swelling.
5. Move your fingers, hand and elbow to increase circulation.
6. The novocaine in your shoulder wears off in about 6 hours. Ask for pain medication as needed.
7. You will receive a prescription for pain medication for when you go home (it will make you constipated if you take it for a long time).

The Next Day After Surgery

1. The large dressing can be removed and a small bandage applied.
2. Remove the sling several times a day to gently move the arm in a pendulum motion: lean forward and passively swing the arm.
3. You can be discharged home from the hospital or surgery center as long as there is no problem.



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At Home

1. You can remove the bandages but leave the small pieces of tape (steristrips) in place.
2. You may shower and get the incision wet. To wash under the operated arm, bend over at the waist and let the arm passively come away from the body. It is safe to wash under the arm in this position. This is the same position as the pendulum exercise.
3. Apply cold to the shoulder for 20 minutes at a time as needed to reduce pain and swelling.
4. Remove the sling several times a day: move the elbow wrist and hand. Lean over and do pendulum exercises for 3 to 5 minutes every 1 to 2 hours.
5. **DO NOT** lift your arm at the shoulder using your muscles.
6. Because of the need for your comfort and the protection of the repaired clavicle fracture, a sling is usually necessary for 4 to 6 weeks, unless otherwise instructed by your surgeon.

OFFICE VISIT:

Please arrange to see your surgeon in the office 7-10 days after surgery for suture removal and further instructions. If you have questions or concerns regarding your surgery or the rehabilitation protocol and exercises call **608-231-3410**