



Ankle Fractures

Ankle Fractures

Ankle injuries are among the most common of bone and joint injuries. Although there are many ways to fracture an ankle bone, a typical mechanism of injury involves a sharp twist of the ankle or a direct impact that fractures at least one of the bony knobs in the ankle. High-impact ankle injuries are especially dangerous if the bone pokes through the skin and is exposed to air. The open wound allows bacteria to contaminate the broken bone and greatly increases the risk of infection.

Ankle Anatomy

The ankle joint is made up of 3 bones coming together.

- The tibia: the main bone of the lower leg that makes up the medial, or inside, ankle bone.
- The fibula: a smaller bone that parallels the tibia in the lower leg, making up the lateral, or outside, ankle bone.
- The talus: One of the bones of the foot.

The ends of both the tibia and fibula are known as the malleoli (singular malleolus) and together they form an arch that sits on top of the talus. The ankle joint is stabilized by ligaments which hold these bones in place.

Symptoms

Symptoms of a broken ankle include the following:

- Pain, swelling, tenderness, and bruising at your ankle joint.
- Inability to move your ankle through its normal range of motion.
- Inability to bear weight on your injured ankle. However, if you can bear weight on the ankle, don't assume there is no fracture.
- A "crack" or "snap" in the ankle at the time of injury.
- Ankle deformity. (In an open fracture, portions of the fractured bone are visible through broken skin.)

Diagnosis

- After reviewing your symptoms, the doctor will want to know:
- How and when your injury happened.
- Whether swelling and bruising developed immediately (often a sign of a more serious injury) or several hours later.



Ankle Fractures

- Whether you had difficulty putting weight on your ankle immediately after the injury happened.

In addition, your doctor will review your medical history, especially any previous injuries to your ankle, foot or lower leg. If you have symptoms of an open fracture, the doctor also will want to know the approximate date of your last tetanus shot.

The doctor will examine your ankle, foot and lower leg checking for swelling, deformity, abrasions, bruising, and tenderness along the lower part of your tibia and fibula, especially at the medial malleolus and lateral malleolus (bony knobs). After a significant injury, your pulse, foot movements, and skin sensation will be checked to see if there are signs of artery or nerve damage.

If the results of your physical examination suggest that that you have a fractured ankle, x-rays will be ordered to confirm the diagnosis.

Treatment

Nonsurgical: Most simple ankle fractures can be treated by immobilizing your ankle and foot in a cast or a brace for six to eight weeks. After the cast is removed, your doctor will prescribe physical therapy to help restore the normal range of motion in your ankle joint. You can expect most ankle fractures, depending on the severity, to take 4-8 weeks for the bones to heal completely and up to several months to regain full use and range of motion of the joint.

Surgical: If you have more extensive damage to your ankle, or the fragments of broken bone are separated far from one another, you may require surgery to stabilize your ankle. Usually surgery involves placement of screws and plates. Surgery is done most of the time within a week of the injury. It is done on an outpatient basis under general anesthesia. A cast or splint is placed after surgery for a variable period of time depending on the severity of the fracture. Weightbearing may be delayed until there is evidence of early fracture healing. This may take 4-8 weeks depending on the severity of the fracture. Finally you will start physical therapy in order to restore ankle range of motion and strengthen the surrounding muscles. More severe fractures, especially those requiring surgical repair, will take longer to heal. It may take up to several months or even a year until you regain full use and range of motion of the joint.

Injuries resulting in broken skin (open or compound fractures) require admission to the hospital and administration of intravenous antibiotics (given into a vein) to prevent infection.

Pain Management

We understand how much discomfort a broken ankle can cause. You will be given a prescription for a pain medication containing narcotics, such as Vicodin (hydrocodone/acetaminophen), Tylenol #3, or Percocet. Please follow the instructions. Try not to take these medications on an empty stomach. If you were instructed not to eat the night prior to your surgery, take your medications with a small sip of water. Ask your doctor if it is OK for you to add ibuprofen (Motrin, Advil), Naprosyn (Aleve), or other arthritis medications for pain control. It is safe to combine this type of medicine with narcotics. **DO NOT TAKE ARTHRITIS MEDICATIONS PRIOR TO YOUR SURGERY OR IF YOU HAVE A HISTORY OF STOMACH BLEEDING.**



Ankle Fractures

(Kaiser Permanente does not endorse the medications or products mentioned. Any trade names listed are for easy identification only.)

As the fracture heals, pain will subside and you will be able to decrease the amount of pain medication needed. Eventually you can discontinue narcotic medication and start taking acetaminophen, ibuprofen, or similar medication for pain control.

Things Not To Do

- Do not drive while taking narcotic pain medication. Do not drive while your leg is in a brace or cast. Most patients with ankle fractures are not able to drive for 2 to 4 months.
- Do not smoke tobacco. Nicotine significantly decreases the process of bone healing and increases the risk of nonunion, a condition in which a break does not heal despite treatment. If you have been a smoker, maybe it is time to seriously consider quitting.
- Do not get your cast or brace wet. If you had surgery, do not get your incision wet until you have been instructed to do so.
- Do not bear weight on the side of the fracture until you have been instructed to do so.

Things To Consider

Fractures of any type increase your likelihood of developing arthritis in the affected joint; the more severe the fracture, the higher the risk of developing some degree of arthritis.

Some patients experience discomfort in the area where the plates and the screws were inserted, even after the fracture has healed. If discomfort persists for a long time, additional surgery can be done to remove the plates and screws.

During the visit to your doctor, please let us know if you need any paperwork for temporary disability. You will be given a VOT (verification of treatment). Please submit this form to our Business Office for completion of the paperwork.

Let us know if you will need a temporary handicap placard for your car as we will gladly provide you with one when appropriate.

Links:

American Academy of Orthopaedic Surgeons: <http://orthoinfo.aaos.org/menus/foot.cfm>