

What Is A Pilon Fracture?



Our skeleton is made of bones. This is the frame for our body. Bones support all of our body weight. Bones protect the softer parts of the body. Bones are made of living tissue. They grow more rapidly when we are young. They begin repairing themselves the moment they are broken.

The center of a bone is called *marrow*. It is softer than the outer part. Bone marrow has cells that become red and white blood cells. Red blood cells carry oxygen. White blood cells help fight disease.

Bones are rigid, but they can bend a little against certain amounts of force. When the force is gone, the bones return to their original shape.

What Are The Symptoms Of A Pilon Fracture?

Pilon fractures are very painful and debilitating injuries. Symptoms include pain and inability to bear weight on the leg. They often result in an obvious

deformity of the ankle joint. Swelling occurs quickly and can be followed by bruising.

What Causes A Pilon Fracture?

The ankle joint involves three bones. The tibia is the main weight bearing bone of the lower leg. The fibula is the thinner outer bone of the lower leg. The ankle bone itself is called the talus. All three bones work together to provide movement and stability at the ankle joint.

Pilon fractures occur when the talus is driven into the leg with such force that the leg bones break at the ankle joint. These injuries are commonly caused by falls and car accidents.

How Is A Pilon Fracture Diagnosed?

The patient's history will be recorded. The orthopaedic foot and ankle surgeon will then perform a focused physical examination of the leg and ankle. The results of this examination will help the surgeon to determine how best to treat the pilon fracture. The surgeon will also be watchful for other injuries that may be present.

In addition, the orthopaedic foot and ankle surgeon will get X-rays of the patient's leg and ankle to see how badly the tibia and fibula are broken. The bones may be broken in multiple places. The surgeon may get a CT scan of the patient's ankle to view all of the broken areas of the tibia and fibula.

What Causes A Pilon Fracture?

Some pilon fractures do not need surgical treatment. These are typically lower-energy injuries to the tibia and fibula at the ankle joint. The bones are still broken but the injuries are less severe. These lower-energy pilon fractures can be treated with a leg cast.

Most pilon fractures have multiple breaks. There is often large separation between fractured fragments and instability in the tibia and fibula at the ankle joint. These fractured bones must be set properly with surgery.

The goals of treatment are to restore alignment and stability and allow healing of the tibia and fibula at the ankle joint. Once the fractures are healing or healed, the orthopaedic foot and ankle surgeon's goals are to restore movement and strength at the patient's ankle joint.

Frequently Asked Questions

If my ankle is at risk for developing arthritis from the pilon fracture itself, why should I have surgery?

It is true that your ankle is at risk for developing arthritis after sustaining a pilon fracture, but the chances of developing ankle arthritis are generally less with surgery compared to nonsurgical treatment. Surgery typically offers the advantage of putting the broken pieces of the tibia and fibula back together. The chances of developing arthritis are less if the shape of the joint is restored than if the joint heals in an abnormal shape without surgery.

Do the implants that have fixed my pilon fracture ever need to be removed?

There are very few reasons to remove any internal plates or screws from the tibia and fibula bones. One reason would be if they are painful after the fracture is healed. This involves surgery on your leg to get them out. Another reason for implant removal would be if they became infected. This can happen while your fracture is healing or after it has already healed. The treatment for infection can be very complex and depends on your specific situation.

Is there anything I can do to improve bone healing?

What helps your tibia and fibula bones heal best after your pilon fracture is to follow your surgeon's post-surgical instructions. Advancing activity too soon after surgery can jeopardize the implants fixing the bones and ultimately bone healing. The surgeon must restrict the patient in certain ways after ORIF of a pilon fracture for the bones to heal properly.

There are things that you can do to improve the chances of the ankle joint and bones healing properly. A diet that is too low in protein can result in decreased bone and wound healing. Increasing your calcium and vitamin D intake may help with bone healing. Taking the recommended daily allowance of both (1,000 to 1,200 mg of calcium and 600 to 800 IU of vitamin D) may help your body to heal. Up to 2,000 mg of calcium per day may help broken bones to heal.

Drinking alcoholic beverages should be limited to no more than two drinks a day. Cigarette and cigar smoking should be stopped completely as they can be harmful to bone and wound healing.