

Is it really better to sprain your ankle than to break it? You be the Judge, by Molly S. Judge, DPM, FACFAS

Interesting but very frustrating, ankle injuries are frequently shrugged off as a “simple sprain” when often they are much more than that. In general, a severe sprain is just shy of breaking or fracturing the ankle. In an ankle sprain, there may be nothing on a routine x-ray to suggest that there is anything out of place and there is no evidence of bone injury that would require surgery. As a consequence, it is presumed that the ankle will simply heal itself since it is “just a sprain.”

The anatomy of the foot and ankle is fairly complicated, and so it is common that injuries within the foot and ankle are simply missed on the first examination. Oftentimes, the foot and ankle are so tender immediately after the injury that it is hard to examine, and so it should be recommended that patients follow up with a foot and ankle specialist to ensure that there isn't a major underlying injury.

The following is a list of injuries commonly associated with the “simple ankle sprain.” These conditions, if left unchecked, can result in ankle instability, chronic pain, arthritis, and even unhealed bone fractures (nonunion of bone). These conditions often require aggressive therapies ranging from physical therapy to surgery for fracture repair and stabilization.

Ankle cartilage damage

This occurs when the leg bone (tibia) compresses onto the ankle bone (talus), resulting in a fracture of the cartilage covering of the joint. This fracture often remains in good position, and so it may look relatively normal on an x-ray taken immediately after the injury. This results in a painful ankle that pops and clicks with motion. Some patients have a deep sense of pain and stiffness until they get the ankle to pop, and then it feels better to walk on it. **An example of this is seen on the x-ray provided.**

The bone that looks like a solid square fitting into a square hole is the talus bone. In the top left corner of that bone, you see a darkened triangular shape, and that is the region of cartilage damage.



Ankle ligament rupture, medial or lateral

Both the inner and outer aspects of the ankle may suffer from ligament injury after a severe ankle sprain. These ligaments work together like stirrups on

the ankle to help support and stabilize the joint. When a ligament ruptures, it may result in major ankle instability and a sense of the ankle giving out.

In simple cases, an air cast can be of benefit to keep the ankle in good position while the ligaments heal over time. In severe injuries, surgery may be required to directly repair these ligaments to provide the best stabilization. In severe cases, special x-ray views, stress x-rays, are taken and these views recreate the position of the original injury, showing if there is ankle instability.

When surgery is required, the patient must stay off the ankle in a cast until the ligaments heal, and that can be 6 weeks or more. When this is the case, it may have been better to have broken a bone in the first place. If the bone had been broken, it would have been seen on x-ray and fixed right away avoiding the pain and instability that required surgery in the end anyway.

Foot fractures

When the foot and ankle are twisted severely, bones can break. Often the ligaments and tendons that run along the back of the ankle and side of the foot can pull off small segments of bone, and this is called an avulsion fracture. Unfortunately, some of the bones that suffer from this avulsion injury are in the foot, not the ankle. What this means is that when the x-rays of the ankle are taken, no fracture is seen and the patient is released with the diagnosis of a "simple ankle sprain."

When continued pain and foot instability develop, the foot-and-ankle specialist is usually the one to find that a fracture has occurred in the foot. After all, no one knows the anatomy of the foot and ankle like the specialist. Special x-ray views, with the patient standing on the foot, are usually necessary.

The fifth metatarsal bone is a long bone on the outside of the foot commonly affected by severe ankle injury. Here is an x-ray of an "L" shaped break in the 5th metatarsal bone. This area may be slow to heal and in this case, the fracture was completely overlooked after a severe ankle injury. Only after the patient suffered with a painful foot for weeks did she seek the help of a foot and ankle specialist who not only identified the fracture but surgically fixed it.



Think it can't happen to you?

Think again as you read about one of my patients: A 45-year-old man came into the office and said, "Doc, my ankle has been killing me." He described a deep, aching sensation in his ankle that became worse after heavy weight-bearing activity and took a long time to "settle down" after a day of athletic activity. What he thought was just arthritis-type pain was becoming worse over time, and he was beginning to reduce his athletic activities to spare himself discomfort. He strives to keep himself physically fit by watching his diet and exercising regularly, so this pain in his ankle was really getting him down.

He denied recent injury but recalled having twisted his ankle approximately two months earlier. He was at the golf course approaching the first tee. As he cleared the rope to get to the tee, he stepped on a rock and his ankle turned in very abruptly. He caught his balance enough to prevent falling and was only able to make it through the next hole before pain caused him to quit for the day.

His wife made him go to the emergency room late that night because he was complaining of pain and swelling. X-rays of the ankle showed no evidence of fracture, and he was told that it was probably just a bad sprain. His ankle was wrapped with a compressive bandage, and he was given crutches to help him walk without so much pain.

He felt that he was much better after about 10 days and so resumed his usual activities despite the fact that he still had some discomfort. Only recently, over the past few weeks, has more important pain developed. What was once stiffness and discomfort is now a deep aching sensation. He points along the outer aspect of the ankle and foot as

his target of pain and is confused as to why he isn't better since he just sprained his ankle.

So why isn't this patient better two months after a simple ankle sprain? The answer is that the ankle injury caused a tear in one of the tendons that runs along the outside of the foot and ankle, the peroneus brevis tendon. This tendon runs from the outer leg, behind the ankle, and then attaches to a bone on the outside of the foot (the 5th metatarsal bone). Routine x-rays won't show much in this case as there is no bone injury. The patient would have gotten more prompt treatment if he had fractured the bone. This happens frequently, so if you still have pain long after what is called a simple ankle sprain, go to a specialist and get a specific diagnosis for prompt effective treatment.

Dr. Judge has a unique practice that specializes in complex deformities, chronic pain, the complications of diabetes, sports medicine & related trauma as well as second opinion surgical consultations. She is the first female in Ohio to complete a three-year surgical residency program. Her residency and fellowship training emphasized major reconstructive surgery for the leg, foot and ankle. She is board-certified in reconstructive rear foot and ankle surgery with offices in Ohio and Michigan. Dr. Judge is a Fellow of the American College of Foot and Ankle Surgeons and serves as the Official Foot and Ankle Physician for The Jamie Farr Owens Corning LPGA Classic.

For further information visit this website: MollyJudge.com for more articles and interesting information regarding foot and ankle conditions.