What Is A Lisfranc Sprain Or Fracture?

Have you ever dropped a heavy box on the top of your foot? Or accidentally stepped in a small hole and twisted your foot? These two common accidents can result in a Lisfranc fracture-dislocation of the midfoot. This fracture gets its name from the French doctor who first described the injury.

Lisfranc injuries occur at the midfoot, where a cluster of small bones forms an arch on top of the foot between the ankle and the toes. From this cluster, five long bones (metatarsals) extend to the toes. The second metatarsal also extends down into the row of small bones and acts as a stabilizing force. The bones are held in place by connective tissues (ligaments) that stretch both across and down the foot. However, there is no connective tissue holding the first metatarsal to the second metatarsal. A twisting fall can break or shift (dislocate) these bones out of place.

What Signs Indicate A Lisfranc Sprain Or Fracture?

Lisfranc fracture-dislocations are often mistaken for sprains. The top of the foot may be swollen and painful. There may be some bruising. If the injury is severe, you may not be able to put any weight on the foot. Lisfranc injuries are often difficult to see on X-rays. Unrecognized Lisfranc injuries can have serious complications such as joint degeneration and compartment syndrome, a build-up of pressure within muscles that can damage nerve cells and blood vessels. If the standard treatment for a sprain (rest, ice and elevation) doesn't reduce the pain and swelling within a day or two, ask your doctor for a referral to an orthopaedic foot and ankle specialist.

How Is A Lisfranc Sprain Or Fracture Diagnosed?

Your orthopedic foot and ankle specialist will examine your foot for signs of injury. He or she may hold your heel steady and move your foot around in a

circle. This motion produces minimal pain with a sprain but severe pain with a Lisfranc injury. If your initial X-ray did not show an injury, your specialist may request several other views, including comparison views of the uninjured foot and stress or weightbearing X-rays. In some cases, a computed tomography (CT) scan or magnetic resonance image (MRI) may be necessary to confirm the diagnosis.

What Is The Treatment?

Treatment for a Lisfranc injury depends on its severity. If the bones have not been forced out of position, you will probably have to wear a cast and refrain from putting weight on the foot for about six weeks. When the cast is removed, you may have to wear a rigid arch support. Your specialist will also recommend foot exercises to build strength and help restore full range of motion.

Often, operative treatment is needed to stabilize the bones and hold them in place until healing is complete. Pins, wires or screws may be used. Afterwards, you will have to wear a cast and limit weightbearing on the foot for six to eight weeks. A walking brace may be prescribed as you progress to a shoe. You may also have to wear an arch support and a rigid soled shoe until all symptoms have disappeared. In some cases, if arthritis develops in these joints, the bones may have to be fused together.

It is important to follow your doctor's orders and refrain from activities until you are given the go-ahead. If you return to activities too quickly, you may easily suffer another injury that results in damage to blood vessels, development of painful arthritis and an even longer healing time.