

Lisfranc (Midfoot) Injury

Lisfranc injuries occur when the bones within the midfoot are broken or the ligaments supporting those bones are torn. Injury severity ranges from simple to complex, involving a number of different bones and joints within the midfoot. This particular injury is often mistaken for a simple sprain, especially when the injury is the direct result of a twist and fall. Injuries to the Lisfranc joint are not simple strains that you can just walk off. This severe injury can take multiple months to heal and might end up requiring surgery to treat the condition.

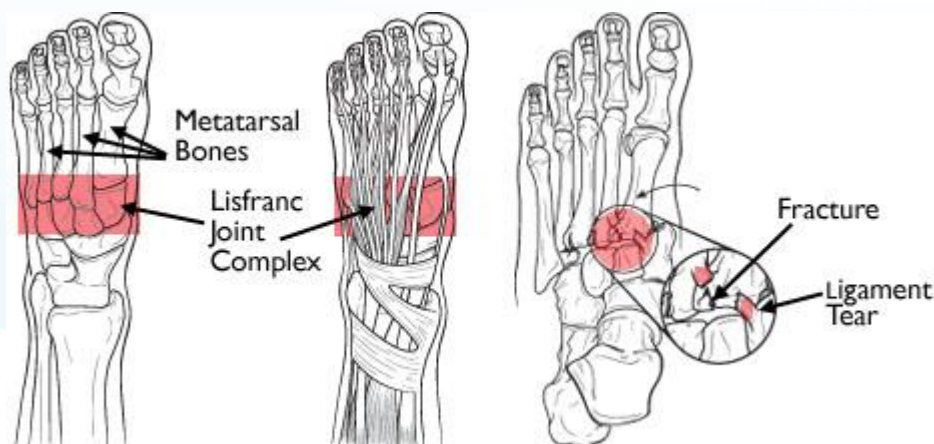
Lisfranc injuries usually happen after direct trauma, such as someone stepping heavily on the foot during sport, or something falling on the foot. The top of the foot may be tender and swollen. You may also notice some bruising on the top and/or bottom of the foot, and some believe that bruising on the sole of the foot is very suggestive of a Lisfranc injury where the ligaments have been torn. There may be some cartilage damage around the injured joint.

One test you can do is to stand on the tip toes of one foot. Pain over the midfoot/top of the foot is a sign of a possible Lisfranc injury.

Lisfranc (Midfoot) Injury Anatomy

The midfoot is the middle region within the foot, where a group of small bones form an arch at the top part of the foot. Out of this cluster, five longer bones extend into the toes. These bones are secured in place with connective tissues stretching across and down the length of the foot. No connective tissue holds the first and second metatarsals together. A fall could end up breaking shifting or breaking these bones and knocking them out of place.

The midfoot is crucial in being able to stabilize the arch and for walking. When walking, the midfoot is responsible for transferring the forces that are generated by the muscles in the calf to the front part of the foot. The midfoot joint was named for French surgeon Jacques Lisfranc de St. Martin, who was a part of the Napoleonic army back in the 1800s. This joint complex has a specialized ligamentous and bony structure, which provides stability to the joint.



Bear in mind that Lisfranc injuries are extremely difficult to diagnose, and are also quite rare. They may be missed by a doctor when examined, and rarely show up on X-ray. Often when they are diagnosed it is simply down to the opinion of the treating clinician.

How to Treat a Lisfranc (Midfoot) Injury:

1. Cast

If there are no dislocations or fractures in the joint and the ligaments aren't torn completely, all you might need is non-surgical treatment to correct the injury. This particular type of treatment plan involves wearing a non-weight-bearing cast for around six weeks. You have to be strict about placing weight on the injured foot throughout this timeframe. After the six weeks is up, you transition into a weight-bearing removable cast or some type of orthotic.

2. Surgery

Surgery is often recommended for those injuries where a fracture occurred in the joints of the midfoot or if there is an abnormal subluxation within the joints. The goal of surgery is to realign all of the dislocated joints and return the broken fragments to their original positions. Following surgery you will require 8-12 weeks of rehabilitation with a therapist.

3. Therapy

Physiotherapy, osteopathy and chiropractic can all be useful for treating this injury. This can help to mobilise the other joints in the foot, and to help the ligament heal using electrotherapy. Acupuncture can help to reduce the pain.

Tips:

- Wear proper footwear whenever participating in sports involving the chance of any direct trauma to the foot.
- To help protect the foot from additional injury, a removable plastic cast might be in order.
- To help minimize swelling and reduce pain to the injured site, apply an ice pack for 5-10 minutes at a time three to five times per day.
- Undergoing massage therapy can help to reduce the amount of swelling within the afflicted foot.
- If you are participating in any pool exercises, you might want to enlist the assistance of a buoyancy aid to help simplify the process and alleviate stress on the joint.