

Metatarsal Stress Fracture

Stress fractures are small cracks in the bone. They often occur from overusing the joint, such as from basketball or distance running. Most of these fractures occur in the weight-bearing bones in the lower leg and the foot. Studies indicate that athletes participating in track and field, tennis, dance, gymnastics and basketball are at an increased risk of these fractures. In any of the aforementioned sports, the repeated stress of the foot hitting into the ground can cause any number of problems.

Rest is the main component to recovering from one of these fractures.

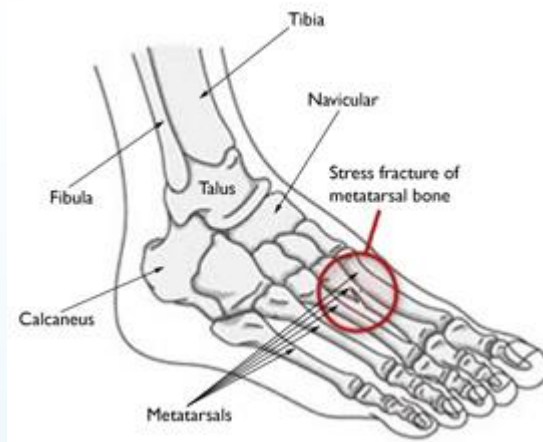
These fractures often occur when you increase your involvement in high-impact activities in terms of intensity, frequency and duration. People who don't exercise can still get these fractures. If osteoporosis or another type of disease has caused the bones to weaken, normal activities can cause these fractures, which is known as a bone insufficiency.

Two of the more commonly fractured metatarsals are the 5th (leading to the small toe) and the first (leading to the big toe).

Metatarsal Stress Fracture Anatomy

In each one of the feet, you have five metatarsal bones running from the toe joints to the arch. The first metatarsal is a lot shorter and thicker than the other bones, which are often similar in size. During the push-off phase when walking, running or jumping, the body weight is transferred to the metatarsals and toes. The first and second of the metatarsals take the majority of the force.

Most problems with the metatarsals develop when there is something that changes with the way the foot works normally, thus affecting how the weight is distributed. This places excess pressure on the metatarsals in the foot, which leads to pain and inflammation, especially in the heads of the metatarsals, which are the rounded ends of the bones connecting with the toe bones.



How to Treat a Metatarsal Stress Fracture:

1. Rest

Taking a break from the activities that caused the fracture in the first place is crucial. It generally takes six to eight weeks for these fractures to completely heal. During the healing process, switch to aerobic activities to reduce the amount of stress placed on the leg and foot. Cycling and swimming are excellent activities. Refrain from doing any physical activity on the injured ankle or foot until you have spoken to a medical professional.

2. Casts

Stress fractures of the fifth metatarsal bone take additional time to heal. A cast might be applied to keep the bones in a fixed position and remove additional stress on the injured leg. To keep the weight off the leg and foot, it might be recommended that you utilize crutches until your bone has had time to heal. You might also be given a walking boot, which immobilizes the foot but does allow you to walk. They seem to be gaining popularity by consultants who favour them over a traditional cast.

3. Therapy

The key thing is to work out the underlying problem. Is it excessive weight bearing through the joint alone? Or is there a biomechanical problem with the foot as well. Your foot Physio or therapist should be able to work out if the problem is biomechanical and if it is, may recommend exercises to the foot or ankle, or orthotics to change the force transmission and foot position.

4. Sports Technique

Speaking to a sports coach can be very useful to rule out any technique issues. Changing or improving technique, especially running technique can be very important.

Tips:

- Doing too much too soon is another common cause of these fractures. Start back into activities slowly to avoid injuring the foot and causing more problems.
- Improper sporting equipment can contribute to the development of stress fractures.
- Errors in technique or training are another contributing factor to these fractures.
- Insufficiency stress fractures occur when the bone is too weak. Good nutrition is important.
- Female athletes who struggle with irregular or absent menstrual cycles might have a decreased bone density.