# **Sesamoiditis**

Sesamoiditis is a condition that affects the sesamoid bones as well as the surrounding tissues in the foot. This condition can be quite painful. The sesamoid bones are quite small and their function is to assist the actions of the tendons. These bones are generally jelly bean sized and they hold the tendons further from the joint by acting as a fulcrum.

Sesamoiditis is inflammation of a sesamoid bone. It is not particularly common, but is sometimes seen in heavy athletes who do a lot of weight bearing through the foot, or put a lot of compression through the foot, or anyone who may do a lot of stamping with the foot. Long distance runners may also suffer with this condition, but again it is quite rare.

### **Sesamoiditis Anatomy**

Most bones are connected by joints to the other bones. The sesamoid bones are not like that though. These tiny bones are surrounded by muscles and tendons. They assist in keeping the tendon from flattening out which in turn achieves a pull that is more constant when it flexes. In the foot, these bones are in the flexor muscle caked the halluces brevis as well as the tendons associated with that muscle. The function of that particular muscle is to flex your big toe down.

Sesamoiditis is when there is inflammation of these bones and the tissues that surround them. Just like any other type of inflammation to bones and tissue, it can be quite painful. In this case, the pain is just below the first joint in the big toe in the area of the ball of the foot. Instead of getting better with time, this gets worse. This worsening of the pain is actually a key indicator that can help to diagnose the condition. It is also possible for a sudden onset of this pain when there are traumas to the foot such as a stress fracture. Because these bones are tiny, X-rays may or may not see a sesamoid bone.

The most common sesamoid bones to injure are the ones around the big toe.

#### **How to Treat Sesamoiditis:**

## 1. Rest and Take an Anti-Inflammatory

When this injury is caused by increases in activities like exercise, rest is generally the best medicine. These tiny bones can become inflamed extremely easily and each step you take will only make the injury worse. Put your feet up for a few days and take an over the counter anti-inflammatory such as Advil or Ibuprofen. These have a twofold effect. They will reduce the swelling and reduce the amount of pain you are in. Discuss with your doctor if antiinflammatories would be suitable.

## 2. Therapy

Seeing a manual therapist can help to assess your foot biomechanics, and also to treat the area by reducing inflammation. Exercises can assist the function of your foot to prevent further re-occurrences.

#### 3. Ice

One of the most trusted ways to treat inflammation related injuries is with ice. Apply ice to the injured site for 5-10 minutes at a time three to five times per day. This will help to reduce the inflammation as well as to reduce the amount of pain.



### Tips:

## **Wear the Right Shoes**

Wearing flat shoes or shoes that have the appropriate amount of room in the toe box is recommended. Flat shoes are not recommended for long term but they will help reduce pain when you have sesamoiditis.

Insert a metatarsal pad in your shoes. This will add cushion to the sesamoid bones when you are walking and keep them from getting injured easily.

When you are exercising make sure that you are wearing sports shoes of good quality. The cushioning in these shoes breaks down after about 6 months so replace them as needed.

#### **Get Orthotics**

This is a very cost effective treatment for sesamoiditis. Orthotics can correct the gait by changing up the stride enough to ensure that all of the muscles and bones are aligned while providing enough cushion to the feet. There are a great many types of orthotics to choose from but some of the best ones for sesamoiditis are Spenco, Powerstep, Sof Sol, Orthaheel, Sorbothane and Superfeet. Get a full length model or use what is called a metatarsal bar or metatarsal pad to ease the pressure on the tiny bones.

