Crossover toe, sometimes referred to as predislocation syndrome or capsulitis, is a condition in which the second toe drifts toward the big toe and eventually crosses over and lies on top of the big toe. The condition is very common. Although crossover toe is most often seen in adults, it can occur at any age. Crossover toe is sometimes confused with a hammertoe, probably because both conditions involve a toe that does not lie in its normal position. However, crossover toe is an entirely different condition from a hammertoe – and a much more complicated problem. Hammertoes generally contract in one plane, the sagittal plane or up and down, whereas the crossover toe deformity is deviated in several different planes.

Symptoms of Crossover Toe

Although the crossing over of the toe usually occurs over a period of time, it can appear more quickly if caused by injury or overuse.

Pain in the ball of the foot (i.e., the bottom of the foot under the second toe) is a common initial complaint – often described as a feeling of a marble in the shoe or that a sock is bunched up. Frequently, wearing shoes becomes difficult as the second toe changes shape and is constricted and rubs inside the shoe. Another common complaint is pain when walking barefoot. Swelling is typically seen in the area of pain, including the base of the toe and sometimes over the top of the toe where it rubs against the shoe. For someone without adequate sensation (e.g., diabetics), this can become a significant risk for an ulceration and subsequent bone infection.

Crossover toe is a progressive disorder, meaning that the longer it is not addressed, the worse it gets and the more challenging it is to repair. It is best to treat crossover toe in the very early stages, i.e., when a patient may have pain but no crossover of the toe. Without treatment, the condition usually worsens to dislocation of the joint. Thus, it is very beneficial to have a foot and ankle surgeon evaluate the foot soon after pain first occurs.

What Causes Crossover Toe?

It is generally believed that crossover toe is a result of abnormal foot mechanics. Normally, there is an even distribution of weight across all of the bones at the base of the toes (metatarsal heads in the foot). Some people carry too much weight on the ball of the foot beneath the second toe joint. This is where the problem originates. The excessive amount of weight-bearing pressure eventually leads to weakening of the supportive ligaments and a failure of the joint to stabilize the toe, resulting in the toe crossing over.

Certain conditions or characteristics can make a person prone to experiencing excessive pressure on the ball of the foot. These most commonly include a severe bunion deformity, a second toe longer than the big toe, an arch that is structurally unstable, and a tight calf muscle (a condition called equines).

Diagnosis

Crossover toe is sometimes misdiagnosed, especially in the early stages when there is pain but the toe has not yet crossed over. The pain experienced in crossover toe is similar

to a condition called Morton's Neuroma. The two disorders, however, are treated very differently - making it crucial to obtain an accurate diagnosis.

In arriving at a diagnosis, the podiatrist will examine the foot, press on it, and maneuver it to reproduce the symptoms. They will also look for potential causes and test the stability of the joint. X-rays are usually ordered, and other imaging studies are sometimes needed.

Treatment: Non-surgical Approaches

The best time to treat crossover toe is in the early stages before the toe starts to drift toward the big toe. At this time, non-surgical approaches can be very effective. Such treatments can stabilize the joint, reduce the symptoms, and address the underlying cause of the condition.

The podiatrist may select one or more of the following options for early treatment of crossover toe:

- The "R.I.C.E." method involves **R**est, **I**ce, Compression and **E**levation. <u>Rest:</u> staying off the foot is important, since walking can cause further damage. <u>Ice:</u> applying ice packs helps reduce the swelling and pain. Apply a bag of ice over a thin towel to the affected area for 20 minutes of each waking hour. Do not put ice directly against the skin. <u>Compression:</u> wearing an elastic bandage or a compression stocking may help prevent further swelling. <u>Elevation:</u> keeping the foot elevated (even with, or slightly above, hip level) can help reduce swelling, though this may appear somewhat excessive for a seemingly minor condition.
- Oral medications. Non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may help relieve the pain and inflammation.
- Immobilization. Sometimes the foot is immobilized for a while so that the injured tissue can heal. A"CAM walker" may be recommended. The "CAM walker" is a lower extremity boot that provides support, protection and immobilization of the foot.
- Taping/splinting. It may be necessary to tape the toe so that it will stay in the correct position. This helps relieve the pain and prevent further drifting of the toe.
- Stretching. Keeping the calf muscles stretched is important in patients who have tight calf muscles.
- Shoe modifications. Supportive shoes with stiff soles are recommended because they control the motion, and lessen the amount of pressure on the ball of the foot.
- Orthotic devices. Custom shoe inserts are often very beneficial. These include arch supports or a metatarsal pad that distributes the weight away from the joint.

When Is Surgery Needed?

Once the second toe starts moving toward the big toe, it will never go back to its normal position without a surgical procedure. Surgery is generally delayed as long as possible, unless the condition is causing significant pain or difficulty with shoe wear.

What to expect with a surgical correction

Surgical results can vary from patient to patient. The goal of surgical correction is to relieve pain and straighten the toe. The toe may need a small pin to maintain this straightened position. A toe straightening surgery is a common procedure to correct significant toe deformities. After surgery, the toe will continue to bend in the middle and will remain straight as intended. The toe and joint may remain stiff for between 3 to 4 months after surgery. Over time, the toe may drift slightly back towards the big toe. To help maintain position after surgery, a toe splint is sometimes recommended.

The podiatrist or foot and ankle surgeon will select the procedure or combination of procedures best suited to the individual patient. For more information consider visiting www.GreatFootCare.com