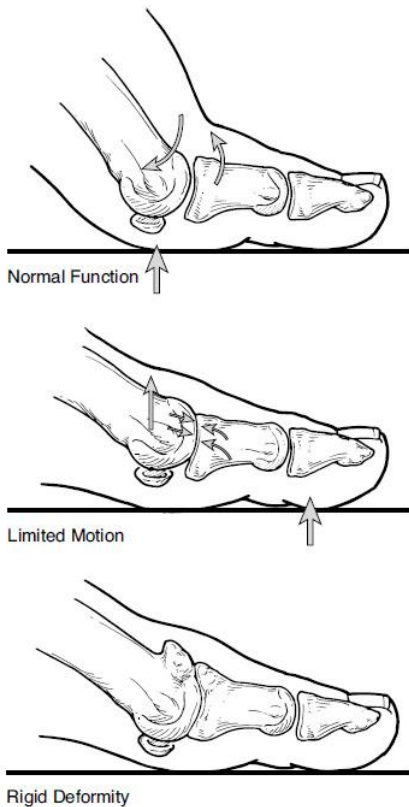


# Hallux Rigidus

Each day, with every step you take, your big toe bears a tremendous amount of stress—a force equal to about twice your body weight. Most of us don't realize how much we use our big toe. We tend to take it for granted, unless a problem develops. One problem that afflicts the big toe is called hallux rigidus, a condition where movement of the toe is restricted to varying degrees. This disorder can be very troubling and even disabling, since we use the all-important big toe whenever we walk, stoop down, climb up, or even stand. If you have pain and/or stiffness in your big toe, you may have this condition.



## WHAT IS HALLUX RIGIDUS

Hallux rigidus is a disorder of the joint located at the base of the big toe. It causes pain and stiffness in the joint, and with time, it gets increasingly harder to bend the toe. Hallux refers to the big toe, while rigidus indicates that the toe is rigid and cannot move. Hallux rigidus is actually a form of degenerative arthritis. Because hallux rigidus is a progressive condition, the toe's motion decreases as time goes on. In its earlier stage, motion of the big toe is only somewhat limited—at that point, the condition is called "hallux limitus." But as the problem advances, the toe's range of motion gradually decreases until it potentially reaches the end stage of "rigidus" where the big toe becomes stiff, or what is sometimes called a "frozen joint." Other problems are also likely to occur as the disorder progresses.

## Early signs and symptoms include:

- Pain and stiffness in the big toe during use (walking, standing, bending, etc.)
- Pain and stiffness aggravated by cold, damp weather.
- Difficulty with certain activities (running, squatting)
- Swelling and inflammation around the joint.

*As the disorder gets more serious, additional symptoms may develop, Including:*

- Pain, even during rest
- Difficulty wearing shoes because bone spurs (overgrowths) develop wearing high-heeled shoes can be particularly difficult.
- Dull pain in the hip, knee, or lower back due to changes in the way you walk
- Limping, in severe cases

## WHAT CAUSES HALLUX RIGIDUS?

The condition can occur on younger adults but most often affects those who are 50 years old or older. Common causes of hallux rigidus are faulty function (biomechanics) and structural abnormalities of the foot that can lead to osteoarthritis in the big toe joint. This type of arthritis the kind that results from "wear and tear" often develops in people who have defects that change the way their foot and big toe functions.

In some people, hallux rigidus runs in the family and is a result of inheriting a foot type that is prone to developing this condition. In other cases, it is associated with overuse especially among people engaged in activities or jobs that increase the stress on the big toe, such as workers who often have to stoop or squat. Your podiatric foot and ankle surgeon can determine the cause of you hallux rigidus and recommend the best treatment.

## DIAGNOSIS OF HALLUX RIGIDUS

Diagnosis is usually apparent on physical examination, but X-rays are usually required to appreciate the extent of the degeneration and bone spur formation. X-rays also show the shape of the metatarsal head, amount of joint space, and presence of cartilage loss. The sooner this condition is diagnosed, the easier it is to treat. If you wait until bone spurs develop, your condition is likely to be more difficult to manage.

### ***Treatment:***

#### ***Non-Surgical Approaches***

Treatment begins with anti-inflammatory medication to control the pain, swelling, heat, and redness of the degenerative arthritis. Special shoes that reduce the amount of bend in the toe during walking will also help the symptoms initially.

**-Shoe modifications:** Shoes that have a large box should be worn, because they put less pressure on your toe. Stiff or rocker-bottom soles may also be recommended. Most likely, you'll have to stop wearing high heels.

**-Orthotic Devices:** Custom orthotics devices may improve the function of your foot.

**-Physical Therapy:** Ultrasound therapy or other physical therapy modalities may be undertaken to provide temporary relief.

#### ***When is surgery needed?***

In some cases, surgery is the only way to eliminate or reduce pain. There are several types of surgery that can be undertaken to treat hallux rigidus. These surgical procedures fall into two categories:

- Some procedures reconstruct and "clean up" the joint. The surgeon removes the arthritis damage from the joint as well as any accompanying bone spurs, and then alters the position of one or more bones in the big toe. These procedures are designed to preserve and restore normal alignment and function of the joint as well as reduce or eliminate pain.

- More aggressive procedures are used when the joint cannot be preserved. These may involve fusion the joint, or removing part or all of the joint and, in some cases, replacing it with an implant, such as is done for the hip or knee. These procedures eliminate painful a stable foot. Your podiatric surgeon is trained to select a surgical procedure best suited to your particular condition and needs.

## ***Precision Foot and Ankle Centers***

### **1) Mild deformities**

- a. Oral anti inflammatory medication, Shoe recommendation
- b. OTC or custom orthotics

### **2) Moderate deformities**

- a. Custom orthotics
- b. Joint salvage surgery ie. Cheilectomy or 1<sup>st</sup> metatarsal osteotomy to decompress the joint

### **3) Severe deformi**

- a. If the cartilage or padding in the joint is worn out more than 50% we recommend a bunionectomy with a total joint replacement. This is for more functional than a joint fusion and typically takes 6 weeks to heal.
- b. You are able to walk after the surgery in a surgical boot/shoe for 3 weeks and then return to your tennis shoes. The implant is made up of silastic and titanium and is very durable.