

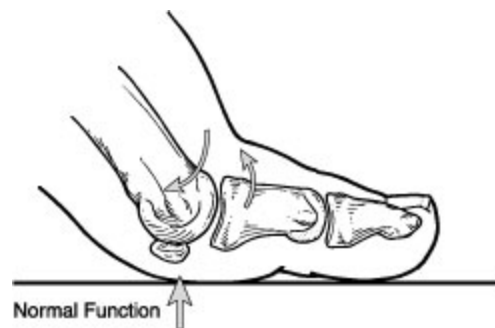
Hallux Rigidus - Stiff Big Toe

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With every step you take, your great 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. Its a condition where movement of the toe is restricted, by varying degrees. This disorder can be very nagging and even disabling, since we use the all-important big toe whenever we walk, bend down, climb up, or even stand. If you have pain and/or stiffness in your big toe, you may have this condition.

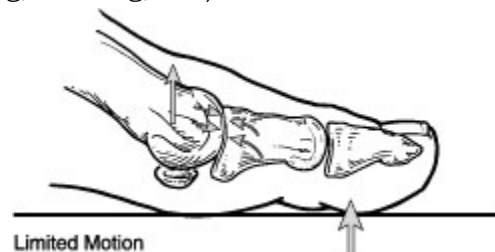
What is Hallux Rigidus?

Hallux rigidus is a disorder of the joint located at the base of the big toe. It causes pain and stiffness in the big toe, 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 - wearing out of the cartilage within the joint that occurs in the foot and other parts of the body. Hallux rigidus is a progressive condition, so the toe's motion decreases as time goes on. Early in the deformity, motion of the big toe is only somewhat limited—at that point, the condition is called "hallux limitus." But as the problem becomes worse, the toe's range of motion gradually decreases until it potentially reaches the end stage of "rigidus"— where the big toe becomes stiff. This 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, propulsion)
- Swelling and inflammation around the joint
- Pain with shoes that touch the big toe joint



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

- Pain, even during rest
- Difficulty wearing shoes due to bone spur (overgrowths) development. 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 can occur in severe cases

What Causes Hallux Rigidus?

Hallux rigidus is caused by faulty function (biomechanics) and structural abnormalities of the foot that lead to osteoarthritis in the big toe joint. This type of wear and tear arthritis often develops in people who have defects that change the way their foot and big toe functions. Examples of those who are susceptible include people with fallen arches or excessive pronation (rolling in) of the ankles. 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. Overuse is a major cause of this problem—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. Hallux rigidus can also result from an injury—such as stubbing your toe. Or it may be caused by some inflammatory diseases, such as rheumatoid arthritis or gout. Your foot and ankle surgeon can determine the cause of your hallux rigidus and recommend the best treatment.



Diagnosis of Hallux Rigidus

The sooner this condition is diagnosed, the easier it is to treat. Therefore, the best time to see a foot and ankle surgeon is when you first notice that your big toe feels stiff or hurts when you walk, stand, bend over, or squat. If you wait until bone spurs develop, your condition is likely to be more difficult to manage.

In diagnosing hallux rigidus, the foot and ankle surgeon will examine your feet and manipulate the toe to determine its range of motion. X-rays are usually required to determine how much arthritis or degeneration of the joint is present as well as to evaluate any bone spurs or other abnormalities that may have formed.

Treatment: Non-Surgical Approaches

When the condition is caught early, it is more likely to respond to less aggressive treatment. In fact, in many cases, early treatment may prevent or postpone the need for surgery in the future. That's why it is important to see your foot and ankle surgeon when you first begin to notice symptoms.

Treatments for mild or moderate cases of hallux rigidus may include:

- Shoe modifications. Shoes that have a large toe 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 orthotic devices may improve the function of your foot.
- Medications. Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may be prescribed to help reduce pain and inflammation. Supplements such as glucosamine-chondroitin sulfate and some vitamins and minerals have had some success in pain reduction.
- Injection therapy. Injections of corticosteroids in small amounts are sometimes given in the affected toe to help reduce the inflammation and pain.
- Physical therapy. Ultrasound therapy or other physical therapy modalities may 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 successfully treat hallux rigidus. These surgical procedures fall into two categories:

- Some procedures reconstruct and "clean up" the joint. The foot and ankle surgeon removes the arthritic damage from the joint as well as any accompanying bone spurs. Sometimes, the surgeon will then alter 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 is beyond repair. These may involve fusing 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 motion in the joint and provide a stable foot.

The procedure that is chosen to correct hallux rigidus depends on multiple factors, including the cause of the condition and the severity, as well as the patient's age, occupation and activity level. Your foot and ankle surgeon is trained to select a surgical procedure best suited to your particular condition and needs. If surgery is performed, recovery periods will vary, depending upon the procedure or procedures performed.