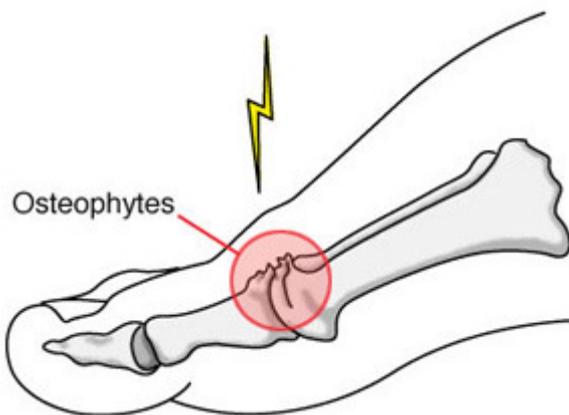


HALLUX RIGIDUS

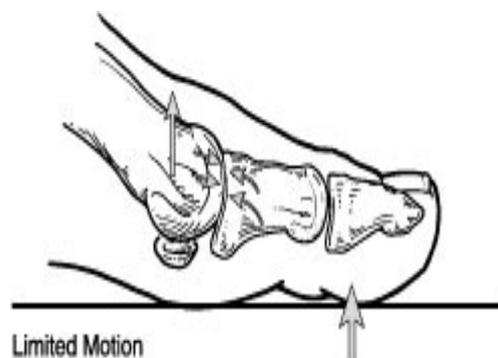
PATIENT INFORMATION

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](#) (a wearing out of the cartilage within the joint that occurs in the foot and other parts of the body).



Because hallux rigidus is a progressive condition, the toe's motion decreases as time goes on. 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.

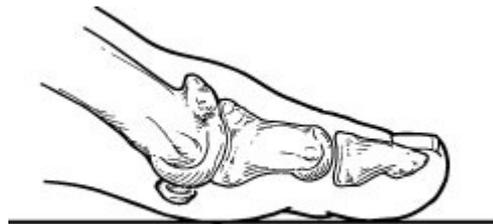


Early signs and symptoms include:

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



Rigid Deformity

What Causes Hallux Rigidus?

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. For example, those with [fallen arches](#) or excessive pronation (rolling in) of the ankles are susceptible to developing hallux rigidus.

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. Hallux rigidus can also result from an injury—even from stubbing your toe. Or it may be caused by certain inflammatory diseases, such as [rheumatoid arthritis](#) or [gout](#).

Treatment: Non-Surgical Approaches

Treatment for mild or moderate cases of hallux rigidus may include one or more of these strategies:

- **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.** [These](#) 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 may also be helpful.

- **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 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:

- **Cheilectomy (kI-lek'-toe-me)**

This surgery is usually recommended when damage is mild or moderate. It involves removing the bone spurs as well as a portion of the foot bone, so the toe has more room to bend. It is designed to "clean up" the joint, and restore movement and function. The incision is made on the top of the foot. The toe and the operative site may remain swollen for several months after the operation, and you will have to wear a stiff-soled sandal for at least two weeks after the surgery. Most patients do experience long-term relief for an average of 3-8 years, but it is not a cure and over time the arthritis usually recurs.

- **Arthrodesis (are-throw-dee'-sis)**

Fusing the bones together (arthrodesis) is often recommended when the damage to the cartilage is severe. The damaged cartilage is removed and pins, screws, or a plate are used to fix the joint in a permanent position. Gradually, the bones grow together. **This type of surgery means that you will not be able to bend the toe at all.** However, it is the most reliable way to reduce pain in these severe cases. These operations are successful > 90% of the time.

For the first six weeks after surgery, you will have to wear a cast or stiff soled shoe. Long term you won't be able to wear high heels, and you may need to wear a shoe with a rocker-type sole. You may have some limitations squatting, and standing on tiptoes. Once the fusion has united (usually 8-12 weeks) there are no absolute restrictions on activity but it would be prudent to avoid high impact repetitive loading such as long distance running.

After Surgery

Foot surgery has the reputation of being painful, but it need not be this way. Local anaesthetic is used after the operation for immediate relief. Painkillers can be used as needed. After any foot surgery pain will be relieved dramatically by elevation of the foot.

It is **VERY IMPORTANT** after the operation to keep your foot well elevated (at or above the level of your heart) for the first 2 weeks for as much of the day as possible. This will decrease discomfort and decrease chances of wound problems.

Return to work depends on many factors but even for a sedentary job you should expect to spend at least 2-4 weeks off work. For a physically demanding job this will be considerably longer.

After any foot surgery your foot may remain swollen for many months. Full recovery after surgery usually takes up to a year. Expect your foot to feel okay at 3 months, good at 6 months, and recovered by 12 months.

Complications can occur with any operation. More common complications in hallux rigidus surgery include:

1. Slow wound healing
2. Infection

Minor wound problems are not uncommon, but deeper infections occur very rarely. Risks of wound problems and infection are higher in patients who smoke, have diabetes, poor blood supply to their feet, or do not elevate their feet after surgery.

3. Numbness and or increased sensitivity around the wound
4. Delay in union of bony fusion and/ or non-union. This sometimes requires another operation.
5. Irritation from metalwear: this sometimes requires screws to be removed.
6. Difficulty fitting shoes: usually this is easier than before the operation. Some patients are disappointed they are still unable to wear certain shoes afterwards, either because the toe remains swollen, the heel of the shoe is too high, or they are just uncomfortable.
7. Mal-position: sometimes despite all the best efforts at surgery the toe fuses in a position which is not as good as it could be, this is uncommon.

