

DIGITAL DEFORMITIES

The toes are vital to walking and stability. Digital deformities can cause quite a bit of trouble due to the shape of the toe sitting inside a restricted shoe box.



Hammertoe is a contracture or bending of one or both joints of the second, third, fourth, or fifth toes. This abnormal bending can put pressure on the toe when wearing shoes, causing problems to develop. Common symptoms of hammertoes include:

- Pain or irritation of the affected toe when wearing shoes.
- Corns (a buildup of skin) on the top, side, or end of the toe, or between two toes. Corns are caused by constant friction against the shoe. They may be soft or hard, depending upon their location.
- Calluses (another type of skin buildup) on the bottom of the toe or on the ball of the foot.

Corns and calluses can be painful and make it difficult to find a comfortable shoe. But even without corns and calluses, hammertoes can cause pain because the joint itself may become dislocated.

What Causes Hammertoe?

Hammer toe results from shoes that don't fit properly or a muscle imbalance, usually in combination with one or more other factors. Muscles work in pairs to straighten and bend the toes. If the toe is bent and held in one position long enough, the muscles tighten and cannot stretch out.

Shoes that narrow toward the toe may make your forefoot look smaller. But they also push the smaller toes into a flexed (bent) position. The toes rub against the shoe, leading to the formation of corns and calluses, which further aggravate the condition. A higher heel forces the foot down and squishes the toes against the shoe, increasing the pressure and the bend in the toe. Eventually, the toe muscles become unable to straighten the toe, even when there is no confining shoe.

Treatment

There are a variety of treatment options for hammertoe. The treatment your podiatric foot and ankle surgeon selects will depend upon the severity of your hammertoe and other factors. A number of non-surgical measures can be undertaken:

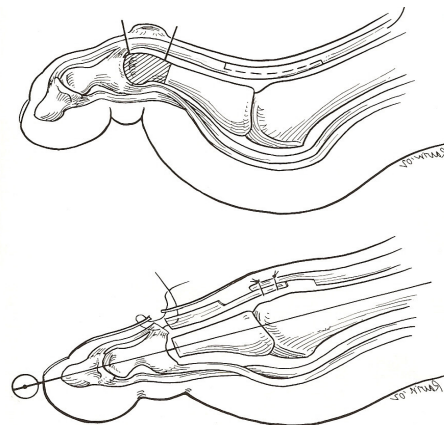
- **Trimming corns and calluses.** This should be done by a healthcare professional. Never attempt to do this yourself, because you run the risk of cuts and infection. Your podiatric surgeon knows the proper way to trim corns to bring you the greatest benefit.
- **Padding corns and calluses.** Your podiatric surgeon can provide or prescribe pads designed to shield corns from irritation. If you want to try over-the-counter pads, avoid the medicated types. Medicated pads are generally not recommended because they may contain a small amount of acid that can be harmful. Consult your podiatric surgeon about this option.
- **Changes in footwear.** Avoid shoes with pointed toes, shoes that are too short, or shoes with high heels, conditions that can force your toe against the front of the shoe. Instead, choose comfortable shoes with a deep, roomy toe box and heels no higher than two inches.

- **Orthotic devices.** A custom orthotic device placed in your shoe may help control the muscle/tendon imbalance.
- **Injection therapy.** Corticosteroid injections are sometimes used to ease pain and inflammation caused by hammertoe.
- **Medications.** Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, are often prescribed to reduce pain and inflammation.
- **Splinting/strapping.** Splints or small straps may be applied by the podiatric surgeon to realign the bent toe.

Surgery

In some cases, usually when the hammertoe has become more rigid, surgery is needed to relieve the pain and discomfort caused by the deformity. Your podiatric surgeon will discuss the options and select a plan tailored to your needs. Among other concerns, he or she will take into consideration the type of shoes you want to wear, the number of toes involved, your activity level, your age, and the severity of the hammertoe.

Arthroplasty is a minor surgical procedure that may be used to treat claw or hammertoes. In this procedure, the podiatrist or podiatric surgeon makes an incision along the toe and trims the head of the proximal phalanx, allowing the toe to straighten. If the affected toe does not straighten sufficiently after arthroplasty, a number of progressive procedures may be used to achieve the desired result. If these procedures are not successful, it is likely that the deformity has been present for so long that the joint can no longer function properly. In this case, a procedure called arthrodesis may restore normal mobility.



Arthrodesis involves fusing two bones together, typically the proximal and middle phalanges. The surgeon removes the cartilage from the base of the middle phalanx, the bones are fixed together with a removable pin, and they eventually fuse together.

Often patients with hammertoe have bunions or other foot deformities corrected at the same time. The length of the recovery period will vary, depending on the procedure or procedures performed.

- Rest, elevation and ice for the first 3-5 days
- 4 weeks in a removable walking cast or post-op shoe
- 6-10 weeks before a return to normal footwear

Possible Complications of Surgery

- Infection or suture reaction
- Prolonged pain
- Sausage toe (swollen toe which can last for months)