

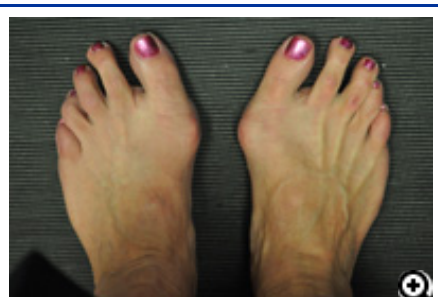
Bunions

A bunion is a painful bony bump that develops on the inside of the foot at the big toe joint. Bunions are often referred to as hallux valgus.

Bunions develop slowly. Pressure on the big toe joint causes the big toe to lean toward the second toe. Over time the normal structure of the bone changes, resulting in the bunion bump. This deformity will gradually increase and may make it painful to wear shoes or walk.

Anyone can get a bunion, but they are more common in women. Many women wear tight, narrow shoes that squeeze the toes together—which makes it more likely for a bunion to develop, worsen and cause painful symptoms.

In most cases, bunion pain is relieved by wearing wider shoes with adequate toe room and using other simple treatments to reduce pressure on the big toe.

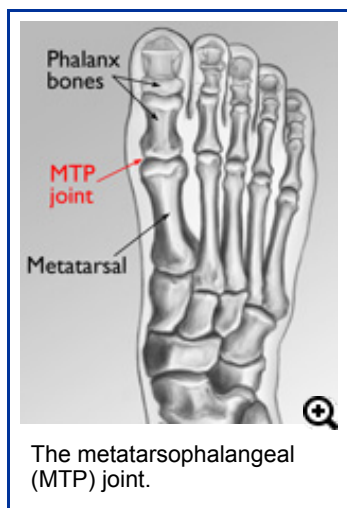


Bunions sometimes develop in both feet.

Anatomy

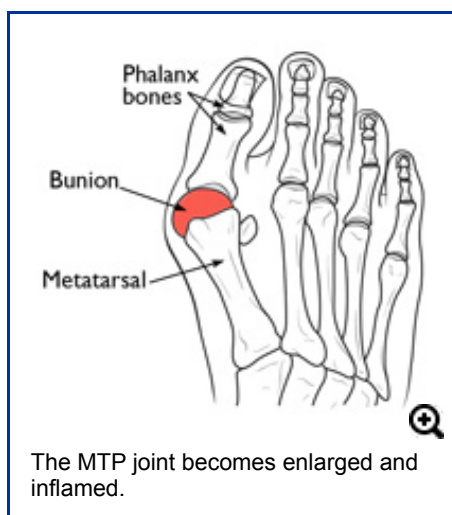
The big toe is made up of two joints. The largest of the two is the metatarsophalangeal joint (MTP), where the first long bone of the foot (metatarsal) meets the first bone of the toe (phalanx).

Bunions develop at the MTP joint.



Description

A bunion forms when the bones that make up the MTP joint move out of alignment: the long metatarsal bone shifts toward the inside of the foot, and the phalanx bones of the big toe angle toward the second toe. The MTP joint gets larger and protrudes from the inside of the forefoot.



The enlarged joint is often inflamed. The word "bunion" comes from the Greek word for turnip, and the bump on the inside of the foot typically looks red and swollen like a turnip.

Bunion Progression

Bunions start out small — but they usually get worse over time (especially if the individual continues to wear tight, narrow shoes). Because the MTP joint flexes with every step, the bigger the bunion gets, the more painful and difficult walking can become.

An advanced bunion can greatly alter the appearance of the foot. In severe bunions, the big toe may angle all the way under or over the second toe. Pressure from the big toe may force the second toe out of alignment, causing it to come in contact with the third toe. Calluses may develop where the toes rub against each other, causing additional discomfort and difficulty walking.

Foot Problems Related to Bunions



In some cases, an enlarged MTP joint may lead to bursitis, a painful condition in which the fluid-filled sac (bursa) that cushions the bone near the joint becomes inflamed. It may also lead to chronic pain and arthritis if the smooth articular cartilage that covers the joint becomes damaged from the joint not gliding smoothly.

Bunions worsen over time. As the big toe angles toward the second toe, it can cross over it and cause additional problems.

Adolescent Bunion

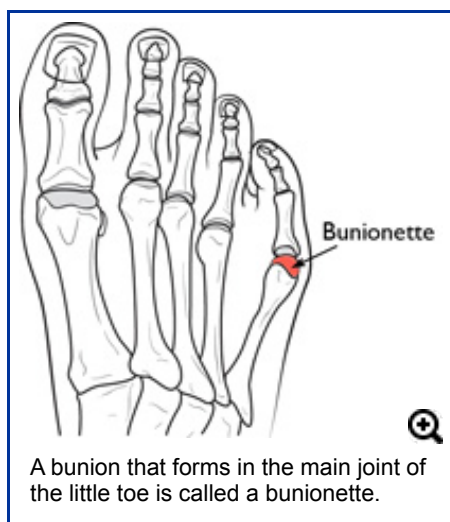
In addition to the common bunion, there are other types of bunions. As the name implies, bunions that occur in young people are called adolescent bunions. These bunions are most common in girls between the ages of 10 and 15.

While a bunion on an adult often restricts motion in the MTP joint, a young person with a bunion can normally move the big toe up and down. An adolescent bunion may still be painful, however, and make it difficult to wear shoes.

As opposed to adult bunions — which usually are associated with long-term wear of narrow, tight shoes — adolescent bunions are often genetic and run in families.

Bunionette

A bunionette, or "tailor's bunion," occurs on the outside of the foot near the base of the little toe. Although it is in a different spot on the foot, a bunionette is very much like a bunion. You may develop painful bursitis and a hard corn or callus over the bump.



Cause

Bunions may be caused by:

- Wearing poorly fitting shoes—in particular, shoes with a narrow, pointed toe box that forces the toes into an unnatural position
- Heredity—some people inherit feet that are more likely to develop bunions due to their shape and structure
- Having an inflammatory condition, such as rheumatoid arthritis, or a neuromuscular condition, such as poliomyelitis

Symptoms

In addition to the visible bump on the inside of the foot, symptoms of a bunion may include:

- Pain and tenderness
- Redness and inflammation
- Hardened skin on the bottom of the foot
- A callus or corn on the bump
- Stiffness and restricted motion in the big toe, which may lead to difficulty in walking

Doctor Examination

Physical Examination

Your doctor will ask you about your medical history, general health, and symptoms. He or she will perform a careful examination of your foot. Although your doctor will probably be able to diagnose your bunion based on your symptoms and on the appearance of your toe, he or she will also order an x-ray.

X-Rays

X-rays provide images of dense structures, such as bone. An x-ray will allow your doctor to check the alignment of your toes and look for damage to the MTP joint.

The alignment of your foot bones changes when you stand or sit. Your doctor will take an x-ray while you are standing in order to more clearly see the malalignment of the bones of your foot. He or she will use the x-rays to determine how severe the bunion is, and how best to correct it.



X-rays of your foot will show your doctor how far out of alignment the bones have become.

Reproduced from Wagner E, Ortiz C: Proximal Oblique Sliding Closing-wedge Osteotomy for Wide-angle Hallux Valgus. Orthopaedic Knowledge Online Journal: Vol 12, No 4, 4/1/2014; Accessed December 4, 2015.

Nonsurgical Treatment

In most cases, bunions are treated without surgery. Although nonsurgical treatment cannot actually "reverse" a bunion, it can help reduce pain and keep the bunion from worsening.

Changes in Footwear

In the vast majority of cases, bunion pain can be managed successfully by switching to shoes that fit properly and do not compress the toes. Some shoes can be modified by using a stretcher to stretch out the areas that put pressure on your toes. Your doctor can give you information about proper shoe fit and the type of shoes that would be best for you. (See below section on "Tips for Proper Shoe Fit")

Padding

Protective "bunion-shield" pads can help cushion the painful area over the bunion. Pads can be purchased at a drugstore or pharmacy. Be sure to test the pads for a short time period first; the size of the pad may increase the pressure on the bump. This could worsen your pain rather than reduce it.

Orthotics and Other Devices

To take pressure off your bunion, your doctor may recommend that you wear over-the-counter or custom-made shoe inserts (orthotics). Toe spacers can be placed between your toes. In some cases, a splint worn at night that places your big toe in a straighter position may help relieve pain.

Icing

Applying ice several times a day for 20 minutes at a time can help reduce swelling. Do not apply ice directly on your skin.

Medications

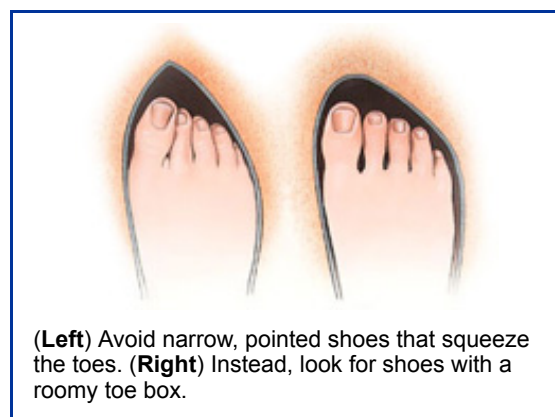
Nonsteroidal anti-inflammatory medications such as ibuprofen and naproxen can help relieve pain and reduce swelling. Other medications can be prescribed to help pain and swelling in patients whose bunions are caused by arthritis.

Tips for Proper Shoe Fit

Because poorly-fitting shoes are a common cause of bunions — and can worsen an existing bunion — it is important to be sure that your shoes fit correctly. In general, go for shoes with wide insteps, broad toes, and soft soles. Avoid shoes that are too short, tight, or sharply pointed, and those with heels higher than a couple of inches. Higher-heeled shoes put more pressure on the forefoot and increase the likelihood of foot problems or injury.

The following tips will help you choose a shoe that fits correctly:

- Do not select shoes by the size marked inside the shoe. Sizes vary among shoe brands and styles. Judge the shoe by how it fits on your foot.
- Select a shoe that conforms as nearly as possible to the shape of your foot.
- Have your feet measured regularly. The size of your feet changes as you grow older.
- Have both feet measured. Most people have one foot larger than the other. Fit to the largest foot.
- Fit at the end of the day when your feet are the largest.
- Stand during the fitting process and check that there is adequate space (3/8" to 1/2") for your longest toe at the end of the shoe.
- Make sure the ball of your foot fits well into the widest part (ball pocket) of the shoe.
- Do not purchase shoes that feel too tight, expecting them to "stretch" to fit.



- Your heel should fit comfortably in the shoe with a minimum amount of slippage.
- Walk in the shoe to make sure it fits and feels right. Fashionable shoes can be comfortable.

When Is Bunion Surgery Needed?

Your doctor may recommend surgery for a bunion or bunionette if, after a period of time, you have pain and difficulty walking despite changes in footwear and other nonsurgical treatments. Bunion surgery realigns bone, ligaments, tendons, and nerves so that the big toe can be brought back to its correct position.

There are several surgical procedures to correct bunions. Although many are done on a same-day basis with no hospital stay, a long recovery is common after bunion surgery.

Surgery to remove an adolescent bunion is not recommended unless the bunion causes extreme pain that does not improve with a change in footwear or addition of orthotics. If an adolescent has bunion surgery, particularly before reaching skeletal maturity, there is a strong chance the bunion will return.

Learn more about surgery for bunions: [Bunion Surgery \(topic.cfm?topic=A00140\)](http://www.orthoinfo.org/topic.cfm?topic=A00140)

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