

# FOOT SURGERY



A Guide to  
Podiatric Surgery



# Understanding Foot Surgery

Does your foot hurt a lot, making it hard for you to walk? Nonsurgical treatment can sometimes help. But for certain problems, surgery by a foot doctor (**podiatrist**) may be your best option. The goals of foot surgery are to relieve pain, restore function, and improve the way your foot looks and feels. Read this booklet to learn more about your foot problem and how surgery may help.

## Relieve Pain

Feet that hurt can make you feel tired, irritable, and less active. A painful foot may also be a symptom of a problem that needs prompt treatment. In many cases, foot surgery can correct your problem and relieve the pain.



## Restore Function

If your feet aren't doing their job, it's hard for you to do yours. When walking becomes a problem, your work, family, and social life can be affected. But you don't have to live with foot pain. Foot surgery can be done at almost any age. And in most cases, it can restore the use of your feet.

## Improve Appearance and Comfort

If your feet have an unusual shape, you may feel self-conscious about how they look. Buying shoes to fit you comfortably can also be hard. Foot surgery can often improve the way your feet look and feel. Shoes may also fit better after foot surgery.



# Learning About the Foot

Your feet are made up of soft tissue and bones. Healthy feet help give you the support you need to move. When you have a foot problem, the soft tissue and bones can be affected. It may be helpful to learn how your feet work. That way you can better understand your foot problem and how surgery may correct it.



# Before Your Foot Surgery

Your medical evaluation helps your podiatrist find out if surgery is right for you. If it is, you will be told about the procedure and any possible risks. Your podiatrist will also tell you how to prepare for surgery, and where it will be done.

## Evaluating Your Foot Problem

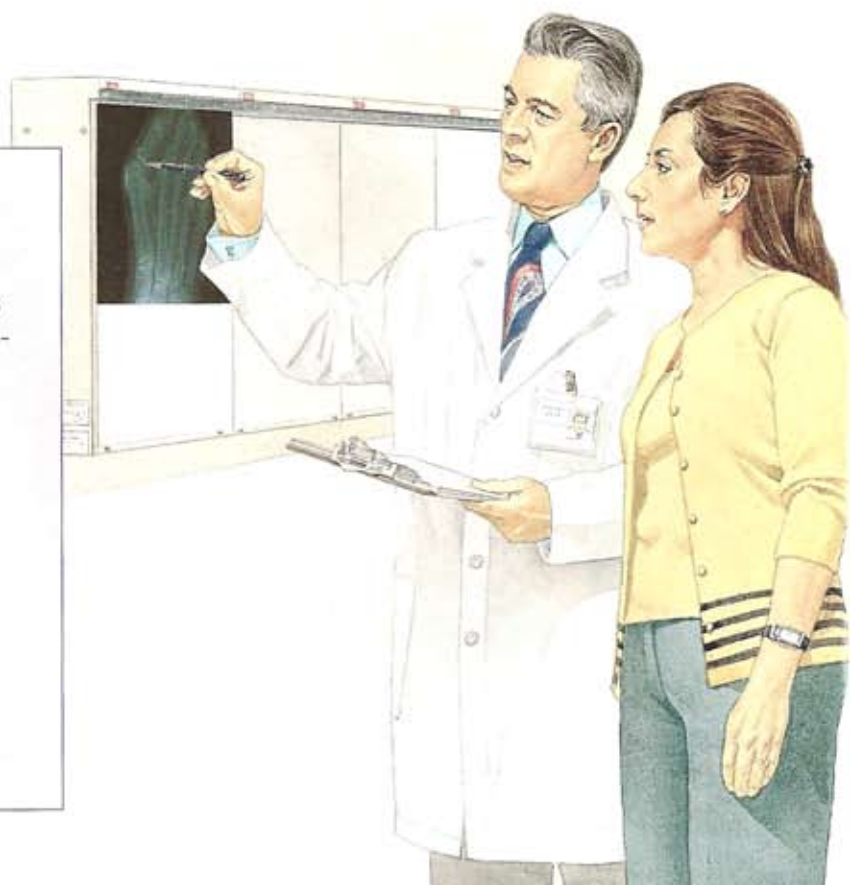
Your podiatrist will evaluate you to assess the cause and severity of your foot problem. You will be asked about your feet and general health. Your feet will be examined. Also, x-rays and lab tests may be done.

- **Health History.** Talk to your podiatrist about your foot problem, any symptoms, and how long you've had them. Tell him or her if your foot problem has been treated before. Be sure to tell your podiatrist about any health problems you have, such as diabetes, allergies, or heart disease. Also, mention all prescription or over-the-counter medications you take.
- **Foot Exam.** Your podiatrist will examine your feet and ankles, checking for pain or tenderness. He or she may also look at your shoes. The wear patterns on your shoes can help show if you have problems walking.
- **Tests.** A foot or an ankle x-ray can help show how severe your bone or joint problem is. An electrocardiogram (ECG) may be done to be sure you're healthy enough for surgery. Certain lab tests may also be ordered, such as blood and urine tests.

## Risks and Complications

Your podiatrist can discuss with you any risks and possible complications of foot surgery. They may include:

- Infection
- Slow healing of skin or bone
- Limited motion due to scarring or swelling
- Return of foot pain or other symptoms



## Preparing for Foot Surgery

When preparing for surgery, you will need to do the following:

- Ask your podiatrist whether you will need to take time off work after surgery.
- If you smoke, try to quit as instructed.
- Ask whether you should stop taking aspirin or other medications before surgery.
- If you are prescribed any medications before surgery, take them as advised.
- Do not eat or drink anything after midnight before your surgery, or as instructed.
- If your health changes, be sure to tell your podiatrist. Even a cold or flu can affect the healing process and delay your surgery.
- Ask what to bring on the day of surgery. Wear loose-fitting clothing. Leave your watch and jewelry at home.
- Arrange for an adult family member or friend to drive you home after surgery.
- Stock up on enough food for a few days.
- Ask a family member or friend to help you at home for a few days while you heal.

## Anesthesia

You will be told the type of anesthesia you'll be given during surgery to stay pain-free. You may have one or more of the following types:

- Local anesthetic** numbs the area around where it's injected.
- Sedatives** keep you relaxed and drowsy but awake during surgery.
- General anesthesia** lets you sleep through the surgery.



## Surgical Settings

- Office.** Many outpatient (same-day) surgeries can be done in your podiatrist's office. You can return home the same day.
- Same-day surgery facility.** This surgery center handles more involved outpatient procedures. You will stay there for a few hours and return home later that day.
- Hospital.** Some surgeries may need to be done in a hospital. Your stay there can be for one or more days.

# Bunions

A bunion is a bony bump. It is most often found near the joint at the base of the big toe. Bunions often run in families. They may cause pain, swelling, and skin irritation. Wearing tight shoes doesn't cause bunions, but it can make them worse. Bunions vary from mild to severe and can be treated in many ways. Some common treatments are shown below.

## □ Mild to Moderate Bunions

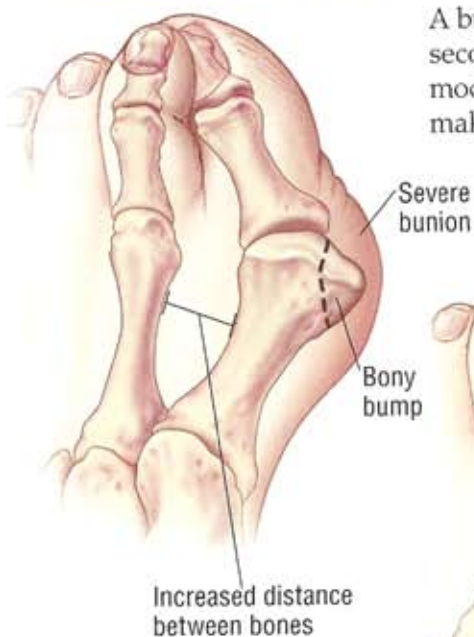


When the distance between the first and second metatarsal bones is greater than normal, the big toe can turn toward the other toes. A mild to moderate bunion can then form, causing foot pain and swelling.



**Head osteotomy.** The first metatarsal bone is cut. Its head is moved closer to the second metatarsal bone. A screw or pin can be used to hold the first metatarsal bone in position. The bony bump is also removed. To protect your foot, you will need to wear a surgical shoe for a few weeks.

## □ Severe Bunions



A bunion is severe when the distance between the first and second metatarsal bones is greater than that of a mild or moderate bunion. The big toe turns toward the other toes, making them buckle. Foot pain and swelling can increase.



**Lapidus procedure.** The bony bump is removed. Some of the tissue around the big toe is cut. A wedge of bone is removed. The bone is straightened. Two screws hold the bone to help the big toe stay straight.

**Base osteotomy.** This procedure is done in some cases. A wedge of bone is removed at the joint. The toe is straightened and held with screws. The bony bump is also removed.

# Degenerative Joint Disease (Arthritis)

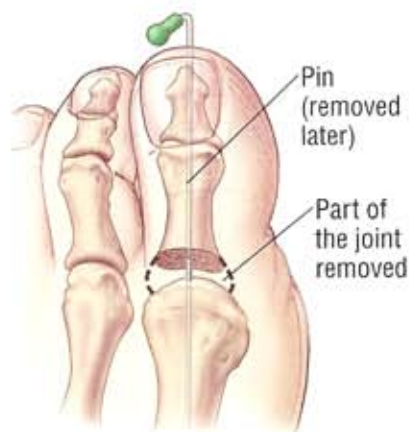
Arthritis often occurs in the joint of a big toe. This bone growth can cause pain and stiffness in the joint. Left untreated, arthritis breaks down the cartilage and destroys the joint. Your treatment options depend on how damaged the joint is.



- Cheilectomy.** This is done when the arthritic joint and cartilage can be saved. Bone growth caused by the arthritis is trimmed. The metatarsal bone is also sometimes shortened during this surgery. To protect your foot, you will need to wear a surgical shoe for several weeks. Once the foot heals, joint movement is restored.



- Fusion.** When the affected joint cannot be repaired, fusion may be done. First, the cartilage and some bone on both sides of the joint are removed. Then, the big toe and metatarsal bones are connected with staples or screws. Your foot may be placed in a cast. While you heal, you will be asked to not bear weight on this foot. You may need crutches for several weeks. Because the joint has been removed, your healed toe will be rigid.



- Arthroplasty.** During surgery, bone growth caused by arthritis is trimmed. Part of the joint is removed. A pin may be used to align the bones and to keep them apart. The pin is removed after several weeks. In some cases, the entire joint may be replaced with an artificial joint. After surgery, you may be able to walk in a day or two. You may have to wear a splint or a surgical shoe for several weeks. When healed, the bones become connected by scar tissue. This lets your toe move.

# Heel Problems and Bone Spurs

Some heel problems result from poor foot mechanics. If your foot moves incorrectly, the ligaments and tendons can become strained, causing **plantar fasciitis**. Also, a **bone spur** (an extra bone growth) can form. Spurs can occur when two bones press against each other. Bone spurs can make walking and wearing shoes painful. Here are some common problems and their treatment.

## □ Plantar Fasciitis



The plantar fascia is a tough band of tissue that runs from the heel to the ball of the foot. Inflammation (pain and swelling) of this band is called plantar fasciitis. Stretching and pulling on the plantar fascia from poor foot mechanics is a common cause. A bone spur (see below) can also cause it. If you have plantar fasciitis, the bottom of your foot may hurt when you stand up after resting or after standing or walking for long periods.

**Plantar fascia release.** To release plantar fascia tension, the fascia can be partially cut near the heel bone. With healing, fibrous tissue fills the cut space. Crutches may be needed for a few weeks after surgery.

**ESWT.** Extracorporeal shockwave therapy (ESWT) uses pulses of high-pressure sound waves that travel through the skin. No incisions are made. The sound waves stimulate the plantar fascia, promoting healing.

## □ Plantar Heel Spur



A bone spur can form when the plantar fascia tugs on the heel bone. The heel spur can irritate the plantar fascia and cause painful walking. Also, a nerve may become trapped. This can cause or increase foot pain and swelling.

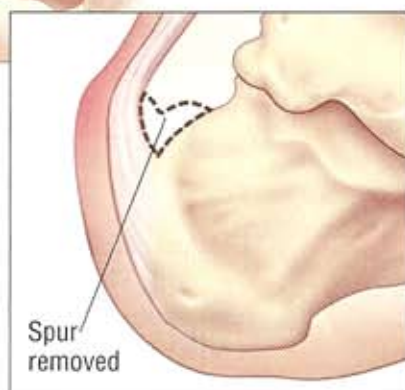
**Spur removal.** In some cases, the bone spur is removed from the heel. Excess bone is cut from either side of the heel bone. The plantar fascia may also be released. You may need crutches for a few weeks.



## □ Spur on the Back of the Heel

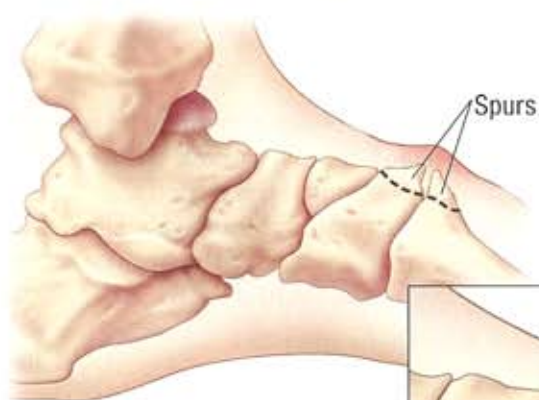


The Achilles tendon connects your calf muscle to the heel bone at the back of your foot. A tight Achilles tendon can cause a spur to form on the heel bone. Shoes can then press and rub on the back of your foot, causing irritation.



**Spur removal.** The heel spur is removed. The Achilles tendon is then repositioned. Your foot is placed in a cast. After this surgery, you'll use crutches for several weeks to keep weight off this foot.

## □ Midfoot Joint Spur



Spurs may grow on top of any of the midfoot joints. They often occur where a metatarsal bone joins a tarsal bone. These spurs form a bump on the top of the foot. You may feel pain while wearing shoes.



**Spur removal.** To get rid of the bump, the spur is removed on both sides of the joint. You can bear weight on your foot right after surgery. But you will need to wear a surgical shoe for a few weeks.

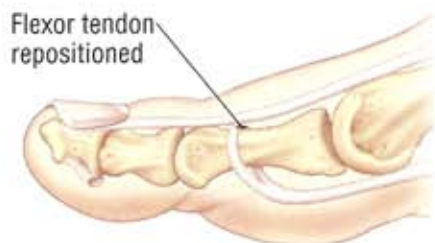
# Toe Problems

Toe problems, such as hammertoes, corns, and spurs, can make walking painful. With hammertoes, one or more toes curl or bend abnormally. This can be caused by an inherited muscle problem, an abnormal bone length, or poor foot mechanics. The affected joints can rub inside shoes, causing corns (buildup of dead skin). Here are some common toe problems and treatments.

## Flexible Hammertoes



When hammertoes are flexible, you can straighten the buckled joints. Flexible hammertoes may become rigid over time. Corns, irritation, and pain are common symptoms.

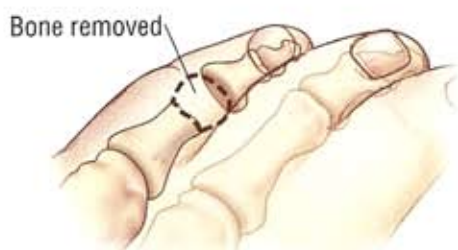


**Tendon release.** This treatment helps straighten the joint. The bottom (flexor) tendon may be repositioned to the top of the affected toe (flexor tendon transfer). Sometimes, the top or bottom tendon is released but not repositioned (tenotomy). Right after surgery, you can bear weight on your foot. You will have to wear a bandage, splint, and surgical shoe for several weeks.

## Curled Fifth Toe

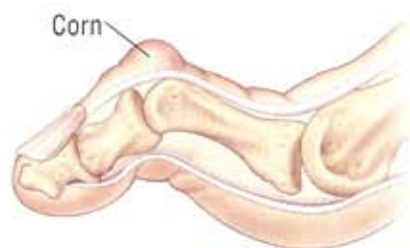


A curled fifth toe is most often inherited. If the fifth toe curls inward, it moves under the next toe and rotates so the nail of the curled toe faces outward. As a result, you bear weight on the side of your toe instead of the bottom. This can cause corns and painful nails.

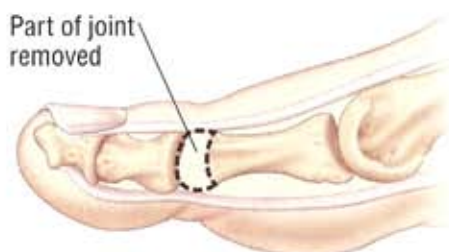


**Derotation arthroplasty.** A wedge of skin and a section of bone are removed to help straighten (derotate) the toe. You can bear weight on your foot right after surgery. In some cases, you will need to wear a bandage, splint, and surgical shoe for a few weeks. When healed, the bones become connected with scar tissue.

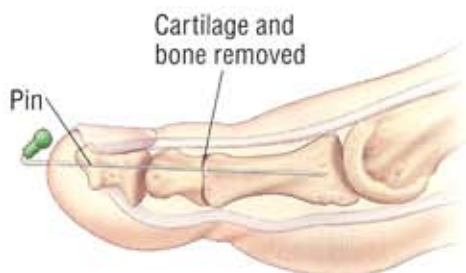
## □ Rigid Hammertoes



Rigid hammertoes are fixed, not flexible. You cannot straighten the buckled joints. Corns, pain, and loss of function can be more severe with rigid hammertoes than with flexible ones.



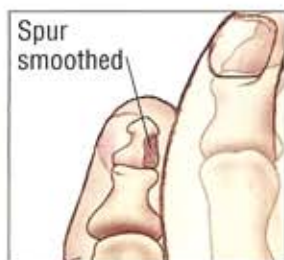
□ **Arthroplasty.** A part of the joint is removed, and the toe is straightened. In some cases, the entire joint is replaced with an implant. You can bear weight on your foot right after surgery. You may need to wear a surgical shoe for a few weeks. When healed, the bones become connected with scar tissue, making your toe flexible.



□ **Fusion.** First, the cartilage and some bone on both sides of the joint are removed. The toe is then straightened and the two bones held together, often with a pin. The pin is removed after several weeks. You can bear weight on your foot right after surgery. But you'll wear a surgical shoe for a few weeks. After healing, the toe will be less flexible but more stable.

## □ Toe Spur

A bone spur on your toe can occur alone or along with other foot problems. Toe spurs have a number of causes and can result in pain when walking.



**Minimal incision surgery.** This procedure involves making only a small skin incision. A tiny power rasp (similar to a dental burr) or a special file is inserted to smooth the bone. After surgery, your foot is bandaged. You can walk on it right away. You may need to wear a surgical shoe for a few weeks.

# Other Forefoot Problems

Extra pressure on the ball of your foot can lead to a neuroma or callus. A **neuroma** is an inflamed nerve. It can cause pain, numbness, or burning. A **plantar callus** is a buildup of hard skin on the ball of the foot. This can feel like a stone in your shoe.

## □ Neuroma



Shoes that are tight can squeeze the two metatarsal bones together. The bones can then pinch the nerve that runs between them. The pinched nerve can become swollen and painful. This often occurs at the base of the third and the fourth toes. Standing or walking for a while can increase the pain.

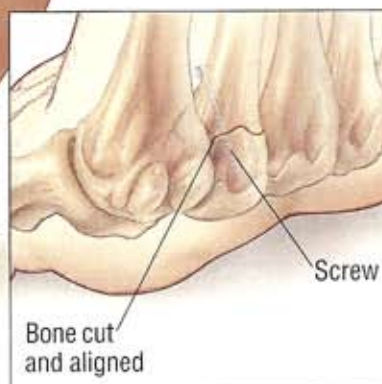


**Neuroma treatment.** The enlarged portion of the inflamed nerve is removed. When healed, the area where the nerve was removed may feel numb. Or, your podiatrist cuts the ligament that touches the neuroma to relieve pressure. The neuroma may then go away on its own.

## □ Plantar Callus



When one metatarsal bone is longer or lower than the others, it presses on the skin beneath, forming a callus. Wearing shoes with thin soles or high heels can also put extra pressure on the ball of your foot. The callus may cause foot pain and irritation.



**Oblique osteotomy.** The affected metatarsal bone is cut and aligned with the other metatarsals. Screws or pins may be used to hold the bone in position. To help you heal, you will have to wear a surgical shoe for a few weeks. The plantar callus goes away on its own over time.

# After Your Surgery

After surgery follow your podiatrist's instructions on relieving any pain you have and caring for your incision. Be sure to see your podiatrist again as advised. He or she can check your foot to make sure it is healing correctly.

## Relieving Pain

Pain is usually most severe the second and third days after surgery. Icing can help reduce swelling and relieve pain. Apply an ice pack or bag of frozen peas wrapped in a thin towel. Keep your foot raised above heart level to help prevent swelling. And take your medications as directed. It is normal to feel some pain when you start walking again. Call your podiatrist if pain is constant or increases.



To lessen pain and swelling, elevate your foot above heart level whenever you're sitting, resting, or sleeping.



When you bathe, cover your foot with a shower bag to keep it dry and help prevent infection.

## Caring for Your Incision

Caring for your incision means keeping it clean and dry. Getting your incision wet can lead to an infection. When you bathe, be sure to protect your foot from getting wet. Your podiatrist may give you a special waterproof "sleeve," or you can tape plastic bags over your foot. If your incision does get wet, tell your podiatrist. Also, tell him or her if you see any changes in your incision, such as redness or swelling.

## When to Call Your Podiatrist

Call your podiatrist if you have any of the following:

- Pain that's not relieved by medication
- Cold and blue toes (signs of a blood flow problem)
- Fever, increased swelling, or redness near the incision (signs of an infection)
- Excessive bleeding from the incision
- A painful, warm, and swollen calf

# To Help You Heal

To help the foot heal properly, you may need to wear a cast. If you do, always keep it dry. Your podiatrist will tell you whether you can bear weight on your foot while it heals. He or she may also prescribe a surgical shoe for you to wear.

## Casts

A cast may be needed after foot surgery to help the foot heal correctly. A cast keeps your foot from moving during the healing process. Some casts are weight bearing (meaning you can walk or put some weight on them), while others are non-weight bearing.

## Weight Bearing

Your bone will be strong enough to bear some weight in about 6 weeks. But the bone takes about 6 months to regain normal strength. So your podiatrist may tell you to use a cane, crutches, or a walker to keep all or part of your weight off your foot for a period of time. You will be shown how to use your walking aid properly. Bearing weight on your foot can improve blood flow and promote healing. But don't use your foot more than recommended. If you do, you may heal more slowly. Be sure to follow your podiatrist's instructions.

## Surgical Shoes

A surgical shoe can protect the foot as it heals. Your podiatrist will tell you when you can start wearing your own shoe again.



You may need crutches to help you move around. You may gradually work up to bearing more weight on your foot.

# On the Road to Recovery

To speed your recovery and help regain foot strength, you may need physical therapy (PT). This includes special exercises, stretching, and other treatments. Your foot may need support even after it heals. If so, wear custom-made shoe inserts as instructed.

## Physical Therapy

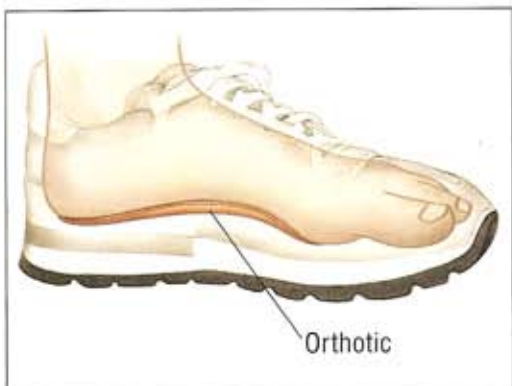
To help you regain foot strength, your podiatrist may suggest physical therapy. PT can help restore your foot movement and function. PT involves special exercises, stretching, and movement of joints and tissue. A whirlpool, ultrasound, or other treatments may also be used.

## Returning to Work

How soon you can return to work depends on the surgery you had and how much activity your job involves. You can likely return to a desk job sooner than to work that requires more walking or standing. Your podiatrist can give you more details about when you can return to your job.

## Orthotics

Your podiatrist may prescribe orthotics. These are custom-made shoe inserts. They help support your feet and improve their function. Your podiatrist fits inserts into your shoes. It may take some time to get used to the inserts. Be sure to wear them as instructed.



Your podiatrist will tell you when you can return to work.

# Back on Your Feet Again

Surgery for your foot problem can help relieve your pain and get you back on your feet again. You can feel better, be more comfortable, and get back to being active. Talk to your podiatrist about your foot surgery options. And check out the resources below for more information.

## Resources

**American Podiatric Medical Association**  
[www.apma.org](http://www.apma.org)

**ePodiatry.com**  
[www.epodiatry.com/foot\\_problems.htm](http://www.epodiatry.com/foot_problems.htm)

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