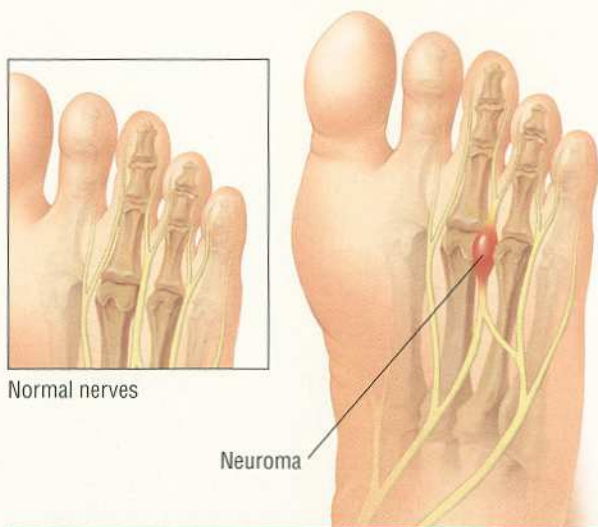


# WHAT IS A NEUROMA?

A neuroma is a painful growth of nerve tissue in the foot—most often between the third and fourth toe bones. It forms when bones in the feet press together and irritate a nerve. This may be caused by wearing tight or poorly fitting shoes, or by repeated stress on the foot. Neuromas often form in women who wear high heels frequently. Injury or a foot deformity can also cause a neuroma. As a neuroma gets worse, it can cause a lot of pain and keep you from activities you enjoy. Fortunately, there are many treatments that provide relief.



## Symptoms

Symptoms of a neuroma often start slowly. As the nerve irritation gets worse, you may feel:

- A sharp, burning pain in the ball of the foot, especially when walking. Many people try to ease the pain by rubbing their foot.
- Tingling or numbness between the toes and in the ball of the foot.
- A feeling that you have a stone in your shoe, or that your sock is wrinkled.
- A painful lump that reproduces your symptoms when touched.

# TREATING NEUROMAS

Your doctor will talk with you about possible treatments. In most cases, painful symptoms can be reduced without surgery. For severe problems, your doctor may recommend treating the nerve directly. Left untreated, neuromas often get worse.

## Reducing Symptoms

The following treatments may be used to reduce painful symptoms.

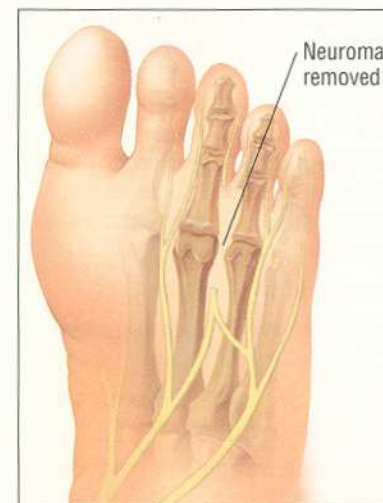
- **Shoe Changes and Orthotics**  
Shoes with good support, a wide toe box, and thick soles can help prevent nerve irritation. Avoid wearing high heels. If needed, custom shoe inserts (orthotics) can help improve foot function and provide extra support for your feet.
- **Padding and Taping**  
Padding and adhesive tape may be placed on the ball of the foot. This can help correct abnormal foot function and decrease pressure on the nerve.
- **Physical Therapy**  
Massaging your feet and using ice packs can help reduce pain and swelling. Sound waves or whirlpools can also help provide relief.
- **Medication**  
Your doctor may prescribe anti-inflammatory medications to reduce tissue swelling. Cortisone injections are sometimes used to relieve swelling in the nerve.



## Treating the Nerve

If other treatments haven't helped, your doctor may suggest treating the nerve directly. This can be done in one of two ways:

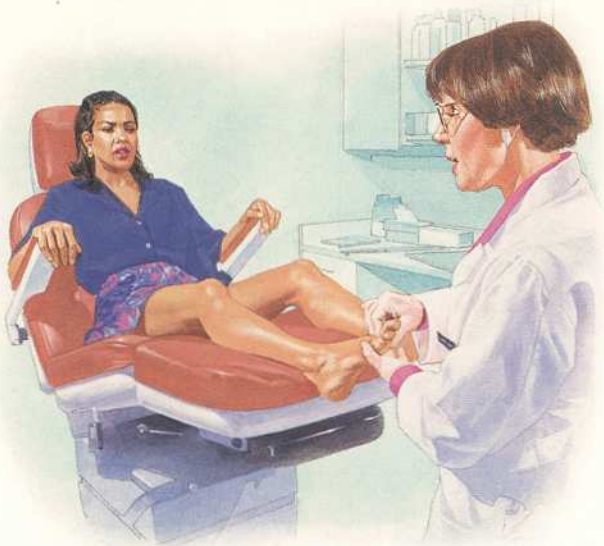
- **Surgery** may be used to remove the neuroma. This can be done in your doctor's office, a surgical center, or a hospital. During surgery, a local anesthetic numbs your foot. An incision is then made to remove the nerve. You can usually go home the same day. Ask your doctor when you can get back on your feet. You can often resume normal activities within 3 to 6 weeks.
- **Injections** of an alcohol solution (sclerotherapy) may be used to permanently numb the nerve. The injections are done in your doctor's office and take just a few minutes to perform. Several treatments are usually needed.



After surgery to remove a neuroma, you may have numbness (sometimes permanent) where the nerve was removed.

## YOUR EVALUATION

To learn more about your foot problem, a **podiatrist** (specially trained foot doctor) will evaluate you. The evaluation includes questions about your health and a foot exam. You may also have tests to ensure your pain isn't caused by other problems.



### Medical History and Foot Exam

Your doctor will ask about your symptoms and any history of foot or nerve problems. You'll then have a foot exam. During the exam, your doctor will gently press on different parts of your foot. This can help locate the source of your pain.

### Diagnostic Tests

Certain tests can help diagnose a neuroma. They also help rule out other problems, such as pain caused by a stress fracture. You may have one or more of the tests below:

- X-rays show bone or joint problems.
- Ultrasound uses sound waves to view tissues in the foot.
- Nerve blocks numb the area around a nerve. This can help locate problems.
- MRI (magnetic resonance imaging) provides images of bones and soft tissues in the foot.

## KEEPING FEET HEALTHY

After treatment, use the following tips to help keep your feet healthy:

- Wear supportive shoes that are roomy enough for you to wiggle your toes. Avoid high heels. Your doctor can tell you what types of shoes are best.
- Avoid activities that put a lot of stress on the foot, such as jumping or running on hard or uneven surfaces.
- See your podiatrist if your symptoms continue or other foot problems arise.



**Consultant:**  
Brad L. Naylor, DPM, MS  
**With contributions by:**  
Stephen R. Doms, DPM  
Lori J. Hillman, DPM  
Richard O. Lundeen, DPM

This brochure is not intended as a substitute for professional podiatric care.

©1994, 1998, 1999, 2001, 2003, 2004  
The StayWell Company, 1100 Grundy Lane,  
San Bruno, CA 94066-3030. [www.krames.com](http://www.krames.com)  
All rights reserved. Lithographed in Canada.

 **KRAMES**  
To order, call: 800-333-3032  
A MediMedia USA Company



**Podiatry Hotline**  
**(949) 637-0038**

**THOMAS RAMBACHER D.P.M.**

PODIATRIC CARE

# NEUROMAS

