



Understanding Peripheral Neuropathy



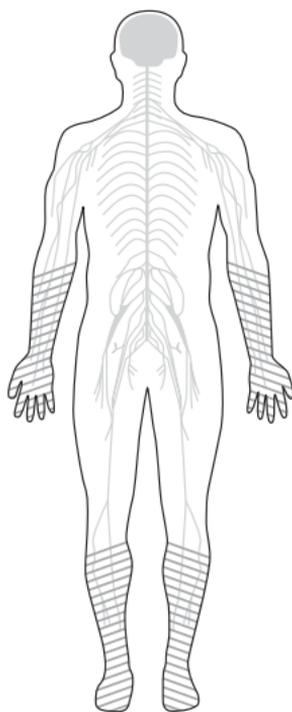
Lois, diagnosed in 1998,
with her husband, Myron.



What Is Peripheral Neuropathy?

Peripheral neuropathy is a nerve disorder. It may cause numbness, tingling, and weakness. It can also cause pain. These symptoms usually start in the longest nerves in the body and so first affect the feet and later the hands. This is sometimes called the “stocking-glove” pattern. The symptoms usually spread slowly and evenly up the legs and arms. Other body parts might also be affected. Most people who develop peripheral neuropathy are over age 55. But people can be affected at any age.

“Stocking-Glove” Pattern of Peripheral Neuropathy Symptoms



What Causes Peripheral Neuropathy?

Peripheral neuropathy has many forms and causes. Some of the causes are still unknown. The most common cause is diabetes. Other common causes include alcohol abuse, poor nutrition, autoimmune processes (where the body’s own immune system attacks parts of the nerves), and genes. Exposure to certain drugs or toxins can lead to neuropathy. Direct pressure or compression of a single nerve—like in carpal tunnel syndrome—may cause it to malfunction.

What Are the Symptoms?

The early symptoms of peripheral neuropathy include:

- Tingling
- Burning
- Pricking, stabbing, or shock-like pain
- Muscle cramping
- Numbness
- Sensitivity to touch

Over the years, nerve damage may worsen. Later symptoms can include:

- Weakness
- Loss of muscle mass
- Digestive problems
- Erectile dysfunction in men
- Dizziness
- Balance and walking problems
- Increased risk of ulcers or infections in the feet

Most types of neuropathy develop and progress slowly. But some types come on quickly. For instance, with Guillain-Barré syndrome, a disorder in which the body's immune system attacks the nerves, neuropathy symptoms appear suddenly and progress rapidly. Then they slowly get better as damaged nerves heal.

Did you know?

Neurologists are medical doctors who specialize in disorders of the brain and nerves. They are the specialists who often diagnose and treat people with peripheral neuropathy.

How Is Peripheral Neuropathy Diagnosed?

Peripheral neuropathy is often first recognized because of the characteristic symptoms. A physician will look for medical conditions associated with neuropathy or medications that commonly cause neuropathy. A neurologic examination can confirm the diagnosis. Sometimes electrical tests of the nerves and muscles (electromyography and nerve conduction studies) help to confirm and classify the neuropathy. More tests may be needed to determine the cause of the neuropathy. Sometimes a specific cause is not identified.

What Are the Treatment Options?

For most types of neuropathy, no treatment is available that can cure or modify the disease. In these cases, treatments are available for the symptoms of the disease, especially pain. Treatments include analgesics, antiepileptic medications, antidepressants, capsaicin, and lidocaine. Physical therapy can help with balance problems and safety issues. Assistive devices, such as canes or walkers, can also be useful.

For some types of neuropathy, treatments are available that can help control the disease or prevent further nerve damage. For people with neuropathy caused by diabetes, controlling blood sugar levels may prevent further nerve damage. Medications that alter the immune system can be used to treat autoimmune neuropathies. Identification of a treatable associated medical cause such as a vitamin deficiency or imbalance of thyroid hormone may arrest or partially reverse the neuropathy.

Exercise may reduce nerve pain and improve overall health and mood. Daily walking, housework, gardening, and other daily chores all count as exercise.

Transcutaneous electric nerve stimulation, or TENS, can help reduce the pain for some people. A TENS unit is a portable device. The device sends an electrical current to electrodes attached to the skin.

Talk to your physician about which treatments may be best for you.

Living with Peripheral Neuropathy

Lifestyle changes may also help relieve symptoms.

Try to:

- Stop smoking. Nicotine has been found to increase pain perception.
- Limit alcohol consumption. While alcohol may temporarily relieve pain, abuse can worsen symptoms.
- Eat a healthy diet.
- Avoid excess vitamin B₆, which can cause neuropathy at levels of more than 100 mg daily.

Living with neuropathy can affect many parts of your life. Many people find relief and support from individual or group counseling specifically focused on pain and related issues. Chronic pain support groups may also help. See **Resources** for organizations to contact.

Partnering with Your Neurologist

To provide the best care, your neurologist needs to know all about your symptoms and medical history. Likewise, you need to get answers to your questions. Keeping a notebook about your condition and bringing a few well-organized questions to your appointments can be helpful.

For Family and Friends

Living with neuropathy can result in emotions such as fear, anger, and hopelessness—for the people with the condition and for loved ones. Many people find that support groups are a source of help, comfort, and information. See **Resources** for organizations to contact.

Help Us Cure Brain Disease

Make a Donation to Research

The American Brain Foundation supports vital research and education to discover causes, improved treatments, and cures for brain and other nervous system diseases. To learn more or to make a donation to support research, visit www.CureBrainDisease.org.

Make Your Voice Heard

To keep research advancing toward future cures and treatments for brain disease, it is important for people affected by neurologic disorders to advocate for more research funding. Contact your members of Congress and ask them to support neurology research by increasing funding for the National Institutes of Health (NIH). Look up your Congressional representatives at www.senate.gov and www.house.gov. Your voice can make a difference.

Take Part in Research

People are needed for clinical trials that can help find new treatments for neurologic disorders. Clinical trials are research studies. They help ensure that new drugs are both safe and effective. Ask your neurologist how to volunteer for a clinical trial. You can also find trials through patient organizations or the American Academy of Neurology website at www.aan.com/view/clinicaltrials.

Resources

American Academy of Neurology

www.aan.com

(800) 879-1960

The American Academy of Neurology website for patients and caregivers offers a wealth of articles, information about events and resources, and links to support groups, clinical trial information, and more.

Neurology Now® magazine

www.neurologynow.com

(800) 879-1960

Free magazine for patients and caregivers, courtesy of the American Academy of Neurology. Stories about people living with neurologic disorders, the latest information on resources and treatments, and more.

***Peripheral Neuropathy* by Norman Latov, MD, PhD**

A Quality of Life Guide published by the American Academy of Neurology as a useful resource for patients and their families and caregivers. Available from major booksellers.

Diabetic Nerve Pain: A Guide for Patients and Families

www.aan.com/patients

(800) 879-1960

Free DVD and guidebook from the Foundation for the American Academy of Neurology for people who are newly diagnosed.

American Chronic Pain Association

www.theacpa.org

(800) 533-3231

American Diabetes Association

www.diabetes.org

(800) DIABETES (342-2383)

Foundation for Peripheral Neuropathy

www.foundationforpn.org

(877) 833-9942

The Neuropathy Association

www.neuropathy.org

(888) PN-FACTS (763-2287)



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Cover photo by Jim Hopwood