

Peripheral Neuropathy

Peripheral neuropathy is caused by damage to the peripheral nerves located throughout your body. These nerves help you feel things and control functions in your organs. Cancer treatment is meant to destroy cancer cells, but unfortunately normal cells can also be damaged. When the chemotherapy damages the peripheral nerves, this is called chemotherapy-induced peripheral neuropathy (CIPN). This is the most common cause of peripheral neuropathy, but other treatments can also cause neuropathy, including surgery and radiation therapy.

What are some of the symptoms of peripheral neuropathy?

Symptoms include tingling, numbness, weakness, cramping, burning, and pain that may be constant or may come and go. Symptoms tend to start in the fingers and toes, progressing to the hands and feet and then the arms and legs. You may have difficulty feeling things that you touch, including sensing hot and cold, and it may be hard to pick things up, hold on to things, or perform tasks, such as buttoning a shirt. You may feel off balance and walking may become more difficult. You may also feel constipated. After treatment, symptoms may slowly get better, usually over the course of a few months. Unfortunately, sometimes the damage is permanent and symptoms do not go away.

How is peripheral neuropathy diagnosed?

Tell your doctor if you think you are experiencing peripheral neuropathy. Your doctor may watch you walk and test your reflexes, strength, and ability to feel light touch, temperature, and painful stimuli. It is possible to go for testing that would provide more information. Your doctor will explain this to you.

How is peripheral neuropathy treated?

There is no treatment for peripheral neuropathy that can fix the nerve damage. Instead, treatment is given to relieve and manage the symptoms. Many of the treatments are not proven to help but many patients do find relief with a combination of medications, dietary supplements, and other types of therapy.

Your doctor may prescribe drugs to help manage the symptoms of peripheral neuropathy, such as:

- An antidepressant (duloxetine, venlafaxine, amitriptyline) for tingling and pain
- An anticonvulsant (phenytoin, carbamazepine) for pain
- A muscle relaxant (baclofen)
- A steroid for short-term use
- Lidocaine patches
- Capsaicin cream
- Opioids or narcotics for severe pain
- A gentle laxative for constipation



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Your doctor may recommend some dietary supplements, such as:

- A combination B vitamin
- Folic acid
- Magnesium
- Glutamine
- Alpha lipoic acid

Other treatments that may help you manage your symptoms include:

- Occupational and/or physical therapy
- Massage
- Exercise
- Guided imagery, meditation, and relaxation
- Biofeedback
- Acupuncture
- Transcutaneous electrical nerve stimulation (TENS), in which the nerves are stimulated to release endorphins with a gentle electric wave

What else can I do?

When you cannot feel your hands or feet, you are at risk for injuries, and these injuries may go unnoticed and become infected. In order to protect yourself, you can:

- Wear good footwear to protect your feet from injury
- Wear gloves when using your hands to protect them from injury
- Inspect your skin for injuries at least once each day
- Be extra careful when handling sharp objects or hot liquids
- Use the hand rail when climbing stairs
- Use non-skid surfaces in the bathroom or any other area of concern
- Set the water heater in your home to 120 degrees
- Use a cane or other device if you have trouble with balance

Consume alcohol in moderation or avoid it altogether because it may make the symptoms worse. Keep the house temperature at a comfortable level because the extreme hot or cold can make symptoms worse. Manage other diseases that can cause neuropathy, such as diabetes. Additionally, get the emotional support you need. You may find a support group or you can ask your doctor for a referral to a mental health professional.

Still have questions?

To learn more, visit www.dana-farber.org/survivor or contact the Adult Survivorship Program at **617-632-4LAD (Life After Diagnosis)** or dfci_adultsurvivors@dfci.harvard.edu.

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