

# Peripheral Neuropathy

## Nerve damage from chemotherapy

### What is peripheral neuropathy?

Neuropathy is damage to your nerves.

Peripheral neuropathy is nerve damage that affects the long nerves in your body. Long nerves go from your spinal cord to your arms, hands, fingers, legs, feet and toes.

These long nerves allow you to feel pain, touch, temperature, position, and vibration (sensory nerves). They are also used for movement, muscle tone, and coordination (motor nerves).

Peripheral neuropathy affects your fingers and toes, but can spread upwards to affect the hands, feet, arms, and legs.

### When your sensory nerves are damaged, you may have:

- Feelings of tingling; “pins and needles,” cold, pinching, burning, or electric shocks (paresthesia).
- Unpleasant sensations when touching or being touched (dysesthesia).
- Numbness or decreased feeling (anesthesia).
- A sense that you cannot feel the floor under your feet or the shape of an object in your hand.
- Trouble feeling the difference between hot or cold temperatures.
- Trouble keeping your shoes on if they do not fit properly.

You may only feel numbness and tingling below your wrist and below your ankle. This is called a “stocking and glove pattern”.



### When your motor nerves are damaged, you may have problems:

- With balance, tripping, or falling.
- Buttoning your shirt or tying your shoes.
- Picking-up and holding objects.
- Doing tasks that need muscle strength and coordination.

### Other symptoms can include:

- Clumsiness
- Constipation (difficulty going “poop”)

If you have severe numbness, you may not feel a new cut on your hands or feet. You could get an infection from the cut.

### When should I call my health care team?

- You have symptoms of peripheral neuropathy.
- Your peripheral neuropathy is getting worse or moving to other parts of your body.

## What causes peripheral neuropathy?

Cancer and cancer treatment can cause peripheral neuropathy. These cancer treatments are the ones that most often cause peripheral neuropathy:

- Bortezomib
- Oxaliplatin
- Brentuximab
- Paclitxel
- Cisplatin
- Vincristine
- Immunotherapy

## Will these problems get better?

Peripheral nerves can heal. Damage from peripheral neuropathy may not be permanent.

If you are taking a medication that causes peripheral neuropathy, your symptoms may go away once you stop taking it. As your nerves heal, your symptoms may get worse for a few months before they get better.

Your body may take a long time to heal. It may take weeks, months or even years for your symptoms to go away.

## What are the treatments for peripheral neuropathy?

Before you start treatment with a medication that might cause peripheral neuropathy, your health care team will ask if you already have symptoms of peripheral neuropathy from something else, such as diabetes. If you already have symptoms, peripheral neuropathy might start sooner or be more severe than usual.

Tell your health care team if you feel any nerve or muscle symptoms. Treating symptoms early is better than waiting until it gets worse.

Your health care team may recommend these treatments for pain:

- Gabapentin, nortriptyline, pregabalin, or duloxetine

- Lidocaine (numbing medication)
- Tiger balm or capsaicin cream
- Hand and foot massage

Medical therapies may help your symptoms:

- Physiotherapy can help with exercise programs and assistive tools.
- Occupational therapists can help you find proper shoes and useful tools to help with activities.
- Podiatrists can help care for your feet.

## What can I do for myself?

If you are unsure about any of these tips or you want to take any medications, vitamins or herbal supplements to help with your symptoms, talk to your health care team first.

## Protect your hands and feet

- Wear loose cotton socks.
- Wear protective shoes with good support and cushioning at all times. Good shoes will support your feet and also protect them from injury.
- Your feet may hurt when you walk but you are not harming the nerves or making your neuropathy worse by walking.
- Check your skin daily to look for any cuts or bruises.
- Wear warm gloves, and shoes or boots in cold temperatures.
- Use a pot holder or oven mitt when cooking.
- Wear gloves when washing dishes or gardening.
- Massage your feet and hands: to ease stiffness.

## Stay safe

Lack of feeling, reduced strength or poor muscle control may make it unsafe for you to do certain things. You may be at risk for falls. Be careful.

- Talk with your health care team about driving. You may have trouble lifting your foot from the gas pedal to the brake when you are driving.
- Keep your home free of clutter and tape down edges of rugs so you do not trip.
- If needed, put bars in your shower or a raised seat on your toilet.
- Check water temperature with your elbow or an unbreakable thermometer before bathing or doing the dishes. Water temperature should be less than 110°F or 43.3°C.
- Make sure your home has good lighting. If you need one, put a night light in the hallway.
- Use non-skid strips or mats in your bathtub or shower.
- Use lightweight cutlery, dishes and cooking tools. Try to use non-breakable glass.
- Hold mugs by the handle not the cup.
- Keep stairs clear. Make sure there are handrails on both sides of the stairs.
- Take away furniture that has sharp edges or corners. Do not use furniture with wheels.
- Do not use electric tools, such as saws or drills. Keep tools off the floor in your yard or garage.

## Exercise

- Walking and stretching helps keep your muscles flexible.
- You may have a higher risk of injuring yourself. If you exercise in a gym, tell the staff that you have peripheral neuropathy.

## Food and drink

- Make sure you do not get constipated (you are not able to go “poop”). If you get constipated, tell your health care team right away.

- More information about managing constipation: <http://www.bccancer.bc.ca/health-info/coping-with-cancer/managing-symptoms-side-effects/constipation>

## Vitamins

- Vitamin B might help repair your damaged nerves. Foods with a lot of vitamin B: leafy green vegetables, whole grains, seeds, nuts, meats, fish, poultry, eggs and dairy.
- Alpha-lipoic acid (an anti-oxidant) might help heal peripheral neuropathy.

## Other tips

- It is best not to drink alcohol or take medications that might make you unsteady.
- Take time when getting up from sitting. Try to move slowly. Do not rush.
- Use helpful tools: Special pens, pencils, knives and forks can be easier to hold. Specialized tools (zipper pulls, buttoners and stretchy shoelaces) can make it easier to dress.
- If you have diabetes, keep good control of your sugar levels.

## Where can I learn more?

- BC Cancer Library Recommended Nerve Damage Websites: [www.bccancer.bc.ca/our-services/services/library/recommended-websites/managing-symptoms-and-side-effects-websites/nerve-damage-websites](http://www.bccancer.bc.ca/our-services/services/library/recommended-websites/managing-symptoms-and-side-effects-websites/nerve-damage-websites)
- The Foundation for Peripheral Neuropathy: [www.foundationforpn.org/](http://www.foundationforpn.org/).
- BC Cancer Supportive Care Services: [www.bccancer.bc.ca/supportivecare](http://www.bccancer.bc.ca/supportivecare)

