

Peripheral Neuropathy (also called Nerve Damage)

Peripheral Neuropathy (also called Nerve Damage)

Peripheral neuropathy is a group of symptoms caused by damage to nerves that control the feelings and movements of our arms, legs, hands, feet, bowel and bladder. The peripheral nerves are nerves outside your brain and spinal cord (also called the central nervous system). In cancer patients, radiation therapy, chemotherapy, surgery or the cancer itself can cause nerve damage.

What are the Symptoms of Peripheral Neuropathy?

Symptoms of peripheral neuropathy depend on the type of nerve affected and where the nerve is found in the body.

When muscle nerves are damaged, symptoms include:

- Balance problems
- Muscle cramps or spasms
- Muscle weakness

When skin nerves are damaged symptoms include:

- Not being able to feel hot or cold well, or at all
- Numbness and tingling, like a pins and needle feeling
- Being very sensitive to touch
- Feeling like you are wearing a glove or sock
- Burning feelings in your toes or fingers
- Trouble writing, typing, zippering zippers, buttoning buttons or tying shoes
- Clumsiness, like dropping things or tripping

When internal organ nerves are damaged symptoms include:

- Bladder problems
- Constipation
- Dizziness
- Sexual health issues

What Should I do if I have Nerve Damage Symptoms?

If you notice any symptoms of nerve damage tell your nurse or doctor right away.

What Drugs can cause Nerve Damage?

Some chemotherapy drugs are more likely to cause nerve damage, including:

- Drugs that affect your immune system, like thalidomide, lenalidomide and pomalidomide.
- Drugs that break down proteins, like bortezomib, carfilzomib, and ixazomib.
- Plant alkaloids, such as vinblastine, vincristine, and vinorelbine.
- Platinum drugs like cisplatin, carboplatin, and oxaliplatin.
- Taxanes, like paclitaxel, docetaxel, and cabazitaxel.

You will be given an information sheet about your chemotherapy which will outline the risk of any side effects, including peripheral neuropathy. Ask your Doctor, Nurse or Pharmacist if you are concerned about your chemotherapy.

How is Nerve Damage Treated?

There are a number of ways to treat nerve damage. The treatment usually depends on the cause of the damage. Sometimes a combination of things will ease your symptoms. Tell your Doctor or Nurse what is working and what is not working so an effective approach can be used.

Sometimes nerve damage symptoms go away a short time after treatment. However, sometimes symptoms can last much longer and need long-term treatment. Severe nerve damage may never go away.

Drugs to help manage pain:

- Duloxetine (brand name Cymbalta) has been proven to reduce pain from nerve damage caused by chemotherapy.
- Non-opioid pain drugs, like Tylenol or Motrin.
- Opioid pain drugs - these strong drugs can control nerve pain, but they can also cause a number of side effects.
- Pain Patches, Cream or Gels that are applied to the skin, like lidocaine.
- Steroids may be used on a short term basis until a complete treatment plan is in place.

You will be given an information sheet about any pain drugs you are prescribed. Ask your doctor, nurse or pharmacist if you have any concerns about the pain drugs you are prescribed.

Self-Management Strategies

Your doctor may also refer you to a psychologist or pain specialist who can teach you some strategies that can help you manage your pain, such as relaxation, managing your energy, pacing your activities and realistic goal setting.

Exercise

Exercise prescribed by your Doctor and supervised by a Physiotherapist, can increase muscle strength and function, circulation and coordination.

Massage Therapy

Check with your Doctor before you have massage therapy. Massage can increase circulation, promote relaxation and can be useful to treat peripheral neuropathy. But, for some cancer patients massage can be harmful.

Occupational Therapy

Your Doctor may refer you to an Occupational Therapist to learn how to use any special equipment and how to adjust your daily activities.

Emotional Support

Dealing with pain can be stressful. If you are having difficulty with anxious feelings or depressed mood, talk to your Doctor or Nurse. They can help you cope with these feelings, or to refer you to another health care provider for assistance.

Complementary Therapies

There is not a lot of research to support the use of complementary therapies, like acupuncture or supplements, for peripheral neuropathy. If you have heard of a complementary therapy you want to try, talk to your Doctor before starting anything new.

How Do I Take Care of My Feet and Hands?

When you have nerve damage, it is very important to take care of your skin. You may not be able to feel the discomfort that would normally tell you there is a problem.

- Every day, check your hands and/or feet for sores or blisters.
- Do not wear shoes or socks that do not fit properly.
- Moisturize feet and hands daily.
- After bathing, dry in between your toes to avoid fungal infections.
- Keep your toenails trimmed, if this is difficult for you ask your Doctor to refer you to a foot care service.

How Can I Avoid Injuries?

People with peripheral neuropathy are at risk for accidents and injuries due to lack of feeling, weakness, and clumsiness. To reduce your risk of injury:

- Wear sturdy shoes that are properly fastened - avoid slippers, flip flops and running shoes with thick soles.
- Wear shoes that cover your whole foot, even when indoors.
- Ask your Doctor about shoes or special inserts that can help protect your feet.
- Make sure the lights are on or use night lights or flashlights.
- Remove throw rugs.
- Clear hallways and walkways of clutter, toys, footstools.
- Wipe up any spills right away.
- Use skid free shower and bathroom mats.
- Use liquid soap instead of a bar soap in the shower.
- Lower water temperature in the home water heater to avoid burns.
- Use a thermometer to make sure the water temperature in your shower or tub is 120 degrees or below.
- When driving, make sure you can feel brake pedals and steering wheel, and be alert for reaction time changes.
- Make sure you have enough strength and coordination to drive.
- Use a cane or walker if you have difficulty walking.
- Use hand rails in hallways and bathrooms to help you keep your balance.
- Be very careful when using knives, scissors, box cutters, and other sharp objects.

- Wear warm socks and gloves during cold weather.
- Wear gloves when you wash dishes, clean, garden, work outdoors, or do repairs.
- Use oven mitts when handling hot dishes, racks, or pans.

Where Can I Learn More?

- Review the “Effects of Cancer and Treatment: Cancer Pain” resource, visit www.nscancer.ca.
- View the “Coping with Cancer Pain” video, visit <https://vimeo.com/showcase/4902954/video/205380543>
- Visit the Canadian Cancer Society Website www.cancer.ca or call their Cancer Information Helpline 1-888-939-3333 (TTY 1-886-786-3934).

*Prepared by: Nova Scotia Health Cancer Care Program
NSHCCP4100 © January 2025 Nova Scotia Health Authority
This pamphlet is for educational purposes only.
It is not intended to replace the advice or professional judgment of a health care provider.
If you have any questions, please ask your health care provider.*