Peripheral Neuropathy During Cancer Treatment

Chemotherapy and other medications can be an important part of cancer treatment. However, they can also cause peripheral neuropathy. Peripheral neuropathy is a condition caused by damage to the nerves outside your brain and spinal cord. Peripheral nerve damage may cause problems with muscle movement and sensation. It can cause pain in your arms, legs, hands and feet. It may affect other parts of your body, as well.

Your risk for peripheral neuropathy may also increase with these conditions and treatments:
- Diabetes
- Alcohol use disorder
- Malnutrition or fast weight loss
- Previous chemotherapy
- Treatment with some antibiotic medications
- Other cancer treatments, such as surgery or radiation therapy
- Some autoimmune disorders

Symptoms

Damage to the nerves that help you feel the sensations of pain, heat, cold and pressure can cause these symptoms:
- Tingling, burning, weakness, cramping, painful numbness or other unusual feelings
- Pain when walking or trouble walking
- Clumsiness or loss of balance
- Trouble picking up items, buttoning clothes or performing other tasks using your fingers
- Shaking or trembling
- Jaw pain
- Hearing problems

These symptoms may get worse for a few weeks after treatment. This is called “coasting.” Most people will get better in 3 to 6 months, but for some, it could take up to a year or more. This is because nerves take a long time to heal. For some, the neuropathy may not go away.

If you have any questions, please ask your physician or nurse.
Care and treatment

Talk with your physician or advanced practice provider (APP) if you think you have neuropathy. Treatment aims to relieve your symptoms. However, treatment cannot relieve numbness. Some people find relief with these remedies:

- Medications (Pain medications and some medications that are used for depression and seizures can ease nerve pain.)
- Applying heat or cold to the affected area
- Massage
- Acupuncture
- Exercise (This may also help improve fatigue, muscle coordination and strength, and healing.)
- Physical therapy and occupational therapy to help with balance, strength and safety
- Menthol-based creams or gels (for temporary relief)
- Relaxation therapy
- Hand or foot braces

What you can do

To prevent injury

- Be very careful when using sharp or dangerous objects.
- Do not walk around barefoot. Wear shoes or slippers at all times when you are out of bed.
- With some types of chemotherapy, you should avoid being exposed to cold. If this applies to you:
  - Cover your skin before going into cold places or touching cold objects.
  - Avoid cold drinks and foods.
  - Wear gloves, socks and hats during cold weather.
- Check your skin regularly for cuts or blisters. Even if your feet hurt, you may not sense an ingrown toenail or infection. Try to go to a podiatrist for regular foot checkups.
- Protect your hands. Use potholders when cooking. Wear gloves when gardening.
- Before bathing, test the water first with a part of your body not affected by neuropathy (such as your elbow), to make sure the water is not too hot.
- Limit or avoid drinking alcohol. This can lead to more nerve damage.

To prevent falls

- Wear shoes with rubber or non-skid soles.
- Remove throw rugs.
- Use a night light or flashlight when getting up in the dark.
If you have problems with strength or balance:
- Move carefully.
- Use handrails on stairs.
- Place a non-skid bathmat in the tub or shower.
- Use a grab bar in the shower.
- Use a cane or walker, as needed.

For comfort
- Shoe insoles, gel inserts or arch supports may help walking.
- Plan your activities. Do what is most important first. When needed, ask for help from others.
- Place needed items close enough to reach when you are in bed.

For more information
You can learn more about peripheral neuropathy at:
- National Institutes of Health – ninds.nih.gov/health-information/disorders/peripheral-neuropathy
- National Cancer Institute – cancer.gov/about-cancer/treatment/side-effects/nerve-problems
- American Cancer Society – cancer.org/treatment/treatments-and-side-effects/physical-side-effects/peripheral-neuropathy.html