Peripheral Neuropathy

A nerve is a bundle of fibers that receives and sends messages between the body and the brain. Nerves are in all parts of the body. Peripheral nerves include nerves in any part of the body outside of the brain and spinal cord (such as the arms, legs, hands, feet and face).

Peripheral nerves allow you to feel sensations, temperatures, position, vibration and pain. They also help with movement, muscle tone and coordination. Damage to peripheral nerves can affect all of these functions.

Damage to a peripheral nerve is called peripheral neuropathy. Peripheral neuropathy is a possible side effect of some cancer treatments (such as chemotherapy).

Signs and Symptoms

Peripheral neuropathy from chemotherapy is most common in the feet and hands. The lists below describe some signs and symptoms that may occur. Talk with your doctor about your symptoms.

Changes in Sensation
- Common symptoms may include feeling numbness, tingling, burning, freezing, cramps and shooting sensations.
- You may have a decreased ability to feel hot and cold temperatures.
- You may have a loss of sensation, numbness or pain when the skin is touched during normal activities (such as walking, putting on shoes or having a blanket over your feet).

Weakness and Loss of Balance
- You may feel a loss of balance or coordination when walking. As a result, you may slap your feet down on the floor or trip while you walk.
- You may be at risk for falls.
- You may not feel an injury on your hands or feet. Finding injuries late can lead to serious infections and permanent damage.
- It may be difficult to button your clothes or tie your shoes.

There are other causes of peripheral neuropathy, such as exposure to certain toxins, diabetes, cancer, alcohol abuse, kidney disease, liver disease, vitamin deficiency, AIDS, hypothyroidism, rheumatoid arthritis, atherosclerosis (hardening of the arteries), carpal tunnel syndrome and inherited forms of neuropathy.

If you already have peripheral neuropathy, chemotherapy may make the symptoms worse.

Treating Symptoms

Peripheral nerves can heal. Symptoms may go away over time after you stop chemotherapy.
Talk with your doctor. Treatment depends on the cause of your symptoms.

Ask your doctor if you may benefit from:
- A referral to a neurologist (a doctor that specializes in treatment of neuropathic pain). Medicines may help control nerve related pain.
- A referral to a physical and occupational therapist. Certain exercises can build strength to help you with walking and maintain your normal activities.

Damage from peripheral neuropathy may not be permanent, but it is possible to have lasting symptoms.

**Safety Tips**

Take safety precautions. Changes in sensation and muscle control can increase your risk for injuries and falls.

**Prevent Falls**
- Avoid sudden movements. Take extra time when you stand up.
- Clear walkways. Remove throw rugs and extension cords. Take extra care when walking on uneven surfaces.
- Make sure you have good light to help you see.
- Leave a light on at night.
- Use railings for support as you go up and down stairs.
- Consider using a cane for more walking support.

**Prevent Burns**
- Adjust the water heater temperature. Test bathing and washing water with your elbow, not with your fingers. Your elbow is a better gauge of the temperature.
- Use protective gloves when you wash dishes. Use potholders or mitts to hold warm or hot dishes when you cook.
- Talk with your doctor before using a heating pad.

**Prevent Other Pain, Injuries and Illness**
- Avoid putting pressure on your nerves. Do not lean on elbows, cross your legs or do repetitive activities with your hands or wrists for a long period of time.
- Check your feet and skin every day for any cuts, sores or bruises.
- Take care of your feet. Wear loose cotton socks and protective shoes with good support, padding and low heels.
- Keep heavy bed covers off of your feet to avoid pain.
- If you have diabetes, maintain good control of your condition.
- Avoid excessive alcohol use.
- Ask your care team if changes in lifestyle (such as diet, weight loss or exercise) may help improve your symptoms.