Peripheral Neuropathy

What is peripheral neuropathy?

Peripheral neuropathy describes damage to the peripheral nerve. A nerve is a bundle of fibers that receives and sends messages between the body and the brain. A peripheral nerve is any nerve that is outside of the brain and spinal cord.

The peripheral nerves play a large role in the body. They give us the ability to feel sensations, temperatures, position, vibration and pain. They are also responsible for movement, muscle tone, and coordination. All of this can be affected by damage to peripheral nerves.

Peripheral nerves can heal, so damage from peripheral neuropathy may not be permanent, but sometimes you may have lasting symptoms. As nerves heal, there may be an increase in symptoms.

What are the signs and symptoms of peripheral neuropathy?

Peripheral neuropathy from chemotherapy occurs most commonly in the feet and hands. Symptoms may go away over time once chemotherapy has stopped.

Sensation
- Common symptoms may include: numbness, tingling, burning, shooting, freezing, cramps and/or pain sensations.
- Your ability to feel hot or cold may be decreased.
- Sometimes, usual activities can cause pain, such as walking, putting on your shoes or having covers on your feet.
- You may have a loss of sensation, or numbness, in your feet when you walk.

Weakness and Loss of Balance
- You may feel a loss of balance and/or coordination when walking. As a result you may slap your feet or trip while you walk.
- You may be at risk for falls.
- You may not feel an injury in your hands or feet. If injuries are not detected early, they can lead to serious infections.
- You may have difficulties buttoning your shirt or tying shoes.

What are the causes of peripheral neuropathy?

Peripheral neuropathy is a potential side effect of some cancer treatments. Chemotherapy using vinca alkaloids, taxanes and platinum compounds, as well as other agents, may cause peripheral neuropathy.
Other causes of peripheral neuropathy can be from exposures 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 acquiring an inherited form of neuropathy.

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

**What do I do if I have any symptoms of peripheral neuropathy?**

Tell your doctor. Peripheral neuropathy may be reversible. Treatment of peripheral neuropathy depends on its cause. Ask your doctor if you should have a consultation with a neurologist or with a doctor that specializes in treatment of neuropathic pain. There are medicines that are used to help control nerve related pain. If symptoms are interfering with your walking, ask for a referral to a physical and occupational therapist, as certain exercises can build strength and help you maintain your normal functioning.

Safety is important for people with peripheral neuropathy due to the lack of sensation, impaired strength or muscle control.

Follow these helpful safety hints:

- Examine your feet and skin daily to detect any cuts 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.
- Take extra care when walking on uneven surfaces to prevent falls. Clear obstacles from walkways, and remove throw rugs and extension cords.
- Have well-lighted spaces to avoid stumbling or falling (leave a light on at night).
- Adjust the water heater temperature to avoid burns. Test your bathing or washing water with your elbow rather than with your fingers for a more accurate gauge of the temperature.
- Use protective gloves when you wash dishes. Use potholders or mitts for handling warm or hot dishes when you cook.
- Avoid sudden movements. Take time when getting up from a lying or seated position.
- Use railings for support as you go up and down stairs.
- Consider the use of a cane if you are unsteady on your feet.
- Avoid leaning on elbows, crossing legs or repetitive activities of the hand and wrists.
- If you have diabetes, maintain good control of the disease.
- Avoid excessive alcohol use.
- Consider a diet high in antioxidants (bright colored fruits and vegetables).