

My Diagnosis: Peripheral Neuropathy/Polyneuropathy

Diagnosis Overview

Peripheral nerves carry information between the body and the central nervous system (brain and spinal cord).

Peripheral neuropathy is also known as polyneuropathy as many nerves throughout the body are injured or damaged causing various symptoms.

Causes

Peripheral neuropathy is very common. There are many types and causes. Often, no cause can be found. Some types of peripheral neuropathy run in families.

Diabetes is the most common cause of polyneuropathy. High blood sugar levels over a long time can damage your nerves.

Other health conditions that may cause neuropathy are:

- Autoimmune disorders, such as rheumatoid arthritis or lupus
- Chronic kidney disease
- Infections such as HIV/AIDS, shingles, hepatitis C
- Low levels of vitamin B1 and B12
- Very high levels of vitamin B6
- Metabolic syndrome, such as obesity, high cholesterol and high blood pressure.
- Poisoning due to heavy metals, such as lead
- Underactive thyroid gland
- Bone marrow disorders
- Tumors
- Certain inherited disorders

Other things that can lead to nerve damage are:

- Long-term, heavy alcohol use
- Glue, lead, mercury, and solvent poisoning
- Certain drugs, such as chemotherapy

Symptoms

Symptoms vary but can include pain, numbness, tingling or weakness.

Pain and Numbness

- Numbness, tingling or burning in the feet and legs can be an early sign of polyneuropathy. This can progress over time to include the hands and arms as well.
- A loss of sensation in the feet can lead to difficulty walking and a sense of imbalance predisposing to falls. A walking aide such as a cane or a walker may be needed in more severe cases.



Muscle Problems

Damage to the nerves can make it harder to control muscles. It can also cause weakness. You may notice problems moving a part of your body. You may fall because your legs buckle. You may trip over your feet. Doing tasks such as buttoning a shirt may be harder. You may also notice that your muscles twitch or cramp. Your muscles may become smaller, also known as atrophy.

Problems With Body Organs

People with polyneuropathy may have problems digesting food. You may feel full or bloated and have heartburn after eating only a little food. Sometimes, you may vomit food that has not been digested well. You may have either loose stools or hard stools. Some people have problems swallowing.

Damage to the nerves to your heart may cause you to feel lightheaded, or faint when you stand up.

Other Symptoms of Nerve Damage

- Sexual problems. Men may have problems with erections. Women may have trouble with vaginal dryness or orgasm.
- Some people may not be able to tell when their blood sugar gets too low.
- Bladder problems. You may leak urine. You may not be able to tell when your bladder is full. Some people are not able to empty their bladder.
- You may sweat too little or too much. This may cause problems controlling your body temperature.



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What to Expect

Tests and Treatments

Treating the cause of polyneuropathy, if known, may improve your symptoms.

- People with diabetes should learn to control their blood sugar.
- If you use alcohol, stop.
- Your medicines may need to be changed. Do not stop taking any medicine before talking to your prescribing provider.
- Replacing a vitamin or making other changes in your diet may help. If you have low levels of B12 or other vitamins, your health care provider may recommend supplements or injections.
- You may need treatments that suppress your immune system if the neuropathy is due to an autoimmune disorder.
- You may need genetic counseling if the condition could be passed on to your children.
- You may have therapy to learn exercises to improve muscle strength and control. Wheelchairs, braces, and splints may improve movement or the ability to use an arm or leg that has nerve damage.

Setting Up Your Home

Safety is very important for people with polyneuropathy. Nerve damage can increase the risk for falls and other injuries. To stay safe:

- Remove loose wires and rugs from areas where you walk.
- Fix uneven flooring in doorways.
- Ensure good lighting, including the use of a nightlight in the bathroom or bedroom over night.
- Put handrails in the bathtub or shower and next to the toilet. Place a slip-proof mat in the bathtub or shower.
- Use or install handrails on stairways in and out of the home.

Watching Your Skin

- Wear shoes at all times to protect your feet from injury. Before you put them on, always check inside your shoes for stones or rough areas that may hurt your feet.
- Check your feet every day. Look at the top, sides, soles, heels, and between the toes. Wash your feet every day with lukewarm water and mild soap. Use lotion, petroleum jelly, lanolin, or oil if a small cut or ulcer is noticed, alert your doctor right away.
- Check bathwater temperature with your elbow before putting your feet in the water.

Treating Pain

Treating Other Symptoms

Taking medicine, sleeping with your head raised, and wearing elastic stockings may help with low blood pressure and fainting. Your provider may give you medicines to help with bowel movement problems. Eating small, frequent meals may help. To help bladder problems, your provider may suggest that you:

- Do Kegel exercises to strengthen your pelvic floor muscles
- Use a urinary catheter, a thin tube inserted into your bladder to drain urine
- Take medicines
- Medicines can often help with erection problems

Care Team

We employ a multidisciplinary approach. You will have access to a variety of specialists, personalized to your underlying condition. We work with patients and their families to provide referrals for additional tests and services as needed.

Frequently Asked Questions

What caused this?

Neuropathy is damage to the nerves. Symptoms often begin in the feet and can progress over time if left untreated.

Causes include diabetes/prediabetes, vitamin deficiencies such as B12 or folate, alcohol, chemotherapy, rheumatologic conditions or certain cancers. At times, no cause is identified, which is called “idiopathic.”

How do you diagnose neuropathy?

Your doctor will perform a detailed neurologic exam. Sometimes, it may be helpful to get a test called an electromyography (EMG) test to confirm the exam findings and better understand the type of nerve damage.

Your doctor will also order blood work to evaluate for an underlying cause.

What are the common symptoms?

Neuropathy can cause weakness in the legs causing foot drop or difficulty walking. It can also cause numbness, tingling, hypersensitivity or “pins and needles.” Patients describe imbalance and feeling unsteady or like they are walking on a sponge. At times, it can be painful, sharp, shooting or feel like electricity in the feet and legs.

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What are the current treatments?

Treatment of neuropathy depends on addressing the underlying cause. For example, if the neuropathy is due to diabetes, controlling blood glucose is important in preventing it from worsening. If the neuropathy is due to a vitamin deficiency, your doctor will recommend vitamin supplements.

At times, pain medication may be needed to control symptoms. Common medications include Gabapentin (Neurontin®), Pregabalin (Lyrica®), Duloxetine (Cymbalta®) or Carbamazepine (Tegretol®). Your doctor will discuss specific side effects when and if these medications are needed.

Can this be genetic?

There are certain neuropathies that are due to a genetic mutation. These include a big group of inherited neuropathies called Charcot-Marie-Tooth (CMT) disease. If there is suspicion for a genetic type of neuropathy, your doctor may talk to you about getting genetic testing to confirm this.

Do you recommend any supplements?

Your doctor will check for vitamin deficiencies or excesses in your blood work. Unless there is a specific vitamin problem found, taking a supplement is not helpful. There are many supplements advertised currently, which include B complex, alpha-lipoic acid and others, which have not been shown to be helpful.

Are there additional resources to learn about peripheral neuropathy?

The Foundation for Peripheral Neuropathy, visit www.foundationforpn.org.

Where can I find more information about help at home, financial assistance, transportation and other social work needs?

Atlantic Neuroscience Institute offers a resource guide which can be provided at your request or downloaded online.



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MyChart

MyChart is your personal, patient-centered, fully secure connection to Atlantic Health System. With MyChart, patients who receive care at any of our locations — including Atlantic Medical Group physician practices, Chilton, Hackettstown, Morristown, Newton and Overlook medical centers — can take an active role in managing their own health.

- eCheck-In
- Access health records, lab results and proof of vaccinations
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Notes



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