

Diabetes: Peripheral Neuropathy

Peripheral neuropathy is one of several nerve problems caused by diabetes. It is caused by damage to the nerves that control how you sense pain, touch, temperature, and vibration.

What causes it?

Over time, high blood sugar levels can damage nerves all through your body. The higher your blood sugar levels, the greater your risk of nerve damage. Your risk also increases as you age and the longer you have diabetes. Smoking and drinking too much alcohol may also increase your risk.

Neuropathy from diabetes affects the longest sensory nerves in your body first. Because of this, nerve problems often begin in your feet.

What are the symptoms?

- You have tingling; numbness; tightness; or a burning, shooting, or stabbing pain in the feet, hands, or other parts of the body.
- You have greatly reduced or greatly increased sensitivity to light touch or temperature.
- You feel weak and have a loss of balance and coordination.

Although neuropathy can start almost anywhere in the body, it most often affects the feet and legs. A reduced ability to feel pain and slow healing can lead to:

- Bone and joint deformities.
- Foot calluses, blisters, or ulcers.
- Infection.

Symptoms develop slowly over months or years. At first you may feel a slight burning sensation in the affected area. If blood sugar



levels stay high over several years, the burning sensation gets worse and then slowly goes away. It is replaced by a lack of feeling or numbness. This makes it easy for an injury to go unnoticed.

A small injury to the foot, such as one caused by a poorly fitting shoe, may lead to bigger problems because you are not aware of the injury. Reduced feeling can also change your step, leading to bone or joint problems. Untreated foot problems can become so bad that your foot or lower leg may have to be amputated.

Call your doctor right away if you have diabetes and you are concerned about a foot injury.

How is it treated?

There is no cure for diabetic neuropathy. But treatment can slow it down and help you cope with symptoms.

- Keep your blood sugar levels within your target range. Most non-pregnant adults need to aim for an average hemoglobin A1c (A1c) level of less than 7%.
- Try to prevent sores and infections, and treat any foot problems right away.

Some people find that medicines, physical therapy, acupuncture, or transcutaneous electrical nerve stimulation (TENS) help relieve pain.

Treatment can involve cognitive behavioral therapy. It is a type of counseling that focuses on changing certain thoughts and behavior patterns to manage your symptoms.

What precautions should you take if you have neuropathy?

Keep your blood sugar under control.

This can prevent neuropathy from getting worse and can reduce your risk of related problems.

Take care of your feet.

- Check your feet every day for problems such as chapped or broken skin, blisters, calluses, or ingrown toenails.

- At each appointment, have your doctor check your feet, joints, balance, and the way you walk.
- Use night-lights to help you see better.
- Have a complete foot exam by your doctor or a podiatrist at least once a year. This exam can detect a loss of sensation in your feet, which can lead to more serious foot problems.
- It is best to have someone trained in foot care to take care of your toenails. Skin injuries around your nails can happen easily and can lead to bad infections.

Your hands also can be easily injured. To protect your hands, use pot holders and avoid hot water when cooking. Always check the temperature of your bath or shower using a part of your body that can feel temperature normally, such as your elbow. Do not use your feet to check the temperature.

Maintain healthy habits.

- Get regular exercise.
- Control your blood pressure.
- Eat a healthy diet.
- Do not smoke.
- Limit your alcohol use.