Nerve Damage and Diabetes

Nerves send messages to and from your brain about pain, temperature, and touch. They tell your muscles when and how to move. They also control body systems that digest food and pass urine. About half of all people with diabetes have some form of nerve damage. It is more common in those who have had the disease for a number of years. Nerve damage from diabetes is called diabetic neuropathy. It can lead to many kinds of problems.

But if you keep your blood glucose levels on target, you may help prevent or delay nerve damage. There are treatments that can help as well.

The two common types are:

**Sensorimotor Neuropathy also known as Peripheral Neuropathy**

This can cause tingling, pain, numbness and weakness in your feet and hands.

**Autonomic Neuropathy**

This type can lead to:

- digestive problems - feeling full, nausea, vomiting, diarrhea, or constipation
- problems with how well your bladder works
- problems having sex
- dizziness or faintness
- increased or decreased sweating
- loss of the typical warning signs of a heart attack
- loss of the warning signs of low blood glucose
- changes in how your eyes react to light and dark

People with diabetes can also have what is called focal neuropathy. This kind of nerve damage causes sudden weakness or pain. It can lead to double vision, a paralysis on one side of the face called Bell’s palsy. It can also cause pain in the front of the thigh or other parts of the body.

People with diabetes also are at risk for compressed nerves. Something in the body presses against a nerve preventing it from sending a signal. Carpal tunnel syndrome is a common cause of numbness and tingling in the fingers. It can lead to muscle pain and weakness as well.

Nerve damage can be hard to diagnose because its symptoms can be caused by other conditions. Symptoms can be very mild. Knowing the symptoms to look for and reporting them to your health care team can help. Make a list of your symptoms. Your doctor will give you an exam and a number of tests to check for nerve damage.

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If you already have nerve damage, controlling your blood glucose and taking these steps can prevent or delay further damage and may lessen your symptoms.

- **Keep your blood glucose levels in your target range.**
  Meal planning, physical activity, and medications, if needed, can help you reach your target range. The general targets recommended by the American Diabetes Association are listed below. Talk with your health care team about whether these targets are right for you.

  Targets:
  - When I wake up and before meals: 80 to 130 mg/dl
  - 2 hours after starting a meal: below 180 mg/dl

- **Report signs of nerve damage to your doctor.**

- **If you have problems, get treatment right away.**
  Early treatment can help prevent more problems later on. For example, if you take care of a foot infection early, it can help prevent amputation.

- **Take good care of your feet.**
  Check your feet every day. If you no longer can feel pain in your feet, you might not notice a foot injury. Look for sores, cuts, or breaks in the skin. Also check for corns, calluses, blisters, red areas, swelling, ingrown toenails, and toenail infections. If it’s hard for you to see or reach your feet, use a mirror or get help from a family member or foot doctor.

- **Protect your feet.**
  If your feet are dry, use a lotion on your skin but not between your toes. Wear shoes and socks that fit well and wear them all the time. Use warm water to wash your feet, and dry them carefully afterward.

- **Get special shoes if needed.**
  If you have foot problems, Medicare may pay for shoes. Ask your health care team about it.

- **Be careful when exercising.**
  Some physical activities are not safe for people with neuropathy. Talk with a diabetes clinical exercise expert who can guide you.

More handouts about this and other topics can be found at http://professional.diabetes.org/PatientEd