

# Peripheral Neuropathy

## Peripheral Neuropathy Overview

Peripheral neuropathy refers to the disorder or damage of the vital nerves connecting rest of the body with the brain and spinal cord. People undergoing peripheral neuropathy may suffer from tingling, numbness, unusual sensations, body weakness, or burning aches. The peripheral nerves compose a complex network within the body that links the brain and spinal cord to the entire body organs. Peripheral nerves stem out of the spinal cord within the body lines called “dermatomes”. Therefore, injury to any one nerve may cause damage one or more dermatomes, resulting in a communication break between brain and other body parts. This whole process may harm muscle movement, prevent normal sensation in the arms and legs, and cause severe body stinginess.

## Peripheral Neuropathy Causes

There are many possible causes of peripheral neuropathy, including:

Diabetes and post herpetic neuralgia are the most common causes of peripheral neuropathy.

50% of the people with diabetes develop some type of neuropathy.

Traumatic Injuries such as car accidents, tripping over, and sports injuries can greatly damage peripheral nerves.

Peripheral nerve entrapments are also considered to be the causes of peripheral neuropathy.

In this condition, pressure on the nerve results in nerve malfunctioning.

It can result from such problems as traumatic injuries, infections, metabolic problems and exposure to toxins. One of the most common causes is diabetes.

Vitamin B and E are significantly important for strengthening of nerves, and their deficiency may cause peripheral neuropathy

Excessive alcohol consumption is also a factor

Lyme disease, Shingles, Epstein-Barr, hepatitis C and HIV/AIDS are some of the viral/bacterial diseases causing peripheral neuropathy

Autoimmune diseases and other diseases including Kidney disease, liver disease and hypothyroidism can also cause peripheral neuropathy.

Both cancerous and noncancerous tumors can cause peripheral neuropathy

Usage or Exposure of toxic substances, such as heavy chemicals and certain medications (especially ones used to treat cancer) are also one of the causes

## Peripheral Neuropathy Symptoms

Peripheral neuropathy basically attacks the sensory nerves (control feelings), motor nerves (control muscles), and autonomic nerves (control automatic functions like heart beat, digestion etc) in the body. Entailing this, following are the symptoms associated with peripheral neuropathy:

Numbness and stinging in feet and hands, which may slowly radiate upward into the legs and arms

Burning pain

Sharp and poking stinging

Sensitivity to touch

Lack of body harmonization

Muscle weakness

Sudden paralysis and disabilities

Bowel or bladder problems

## Peripheral Neuropathy Diagnosis

Peripheral neuropathy is not a disease but a symptom with many probable causes. Therefore its diagnosis is quite difficult, but following steps can prove helpful:

A detailed medical history will be needed to determine the cause of the peripheral neuropathy.

A neurological exam may be conducted to examine problems with movement, sensation, or organ functioning.

Blood tests may be done to identify certain medical conditions such as diabetes and vitamin deficiencies.

Tests including EMG, Nerve conduction tests, Nerve Biopsy, X-rays, MRI and CT scans are conducted to reveal neuropathy

## Peripheral Neuropathy Treatment

The treatment of Peripheral Neuropathy entails two things. 1) Fix the condition causing neuropathy and 2) relieve the patient from the painful symptoms. Following treatments are broadly used to treat the condition:

- **Pain medications** and pain relievers may be helpful for treating mild pain. For severe pain, your pain physician may prescribe the use of **painkillers and antidepressants**.
- **Anti-seizure medications** such as gabapentin (Neurontin), topiramate (Topamax), pregabalin (Lyrica), carbamazepine (Tegretol) and phenytoin (Dilantin) are also used.
- **Lidocaine patch** is applied to the hurting area to relieve the painful feeling. Used not more than 4 times a day with minimal side effects.
- **TENS therapy**, in which a moderate electric current is passed through electrodes placed on the skin is also effective for treating peripheral neuropathy.

For more information and details, consult Mind and Body Pain Clinic

## **Peripheral Neuropathy Prevention**

Following are the three best methods to prevent peripheral neuropathy:

If you have diabetes or any other medical condition, make sure you seek proper pain treatment to keep it controlled. This will prevent you from falling prey to Peripheral Neuropathy and central sensitization of your pain.

Consume healthy diet that is rich in fiber and low in carbs. Eat fresh fruits, vegetables, whole grains and proteins.

To cure vitamin B-12 deficiency causing nerve damage, eat meat, fish, eggs, low fat dairy products and cereals. Regular exercise is extremely important to keep your blood circulation good and metabolism levels stable.

To avoid nerve damage, avoid toxic exposure, incorrect body posture, and repetitive body movements. Also, quit on tobacco smoking!