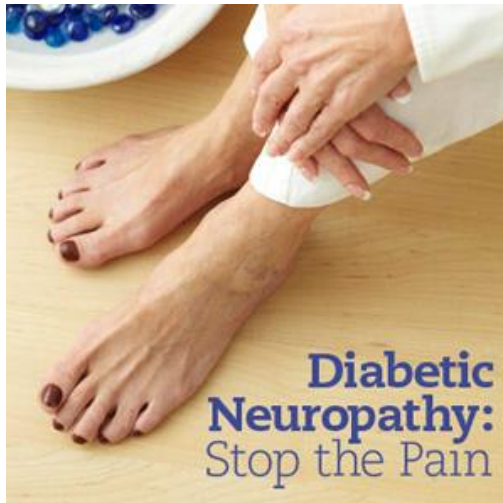


# Diabetic Neuropathy

## What is Diabetic Neuropathy?

A challenging yet painful disorder that arises as a result of prolonged periods of time with exposure to elevated blood sugar levels is known as diabetic neuropathy. This condition is the result of damage to nerve endings and tissues, resulting in a loss of sensation. The condition is common among people with diabetes, and once the condition begins to develop, it cannot be reversed.



## What are the Symptoms of Diabetic Neuropathy?

The most significant symptom associated with this condition is pain in the extremities, hands and feet. It is reported that over 65% of all people with diabetes develop some form of neuropathy or nerve damage.

This number is significant, yet challenging to doctors and pain management doctors. Management of blood sugar levels as well as symptoms related to the disease is needed to help control the progression of further pain and symptoms.



The most common symptoms associated with diabetic neuropathy include:

- Burning and tingling sensations in the feet, hands, toes, fingers or limbs
- Muscle weakness, and if the legs are affected, an inability to walk
- Serious foot and hand problems, trouble walking, gripping
- Sharp and stabbing pains, especially at night
- Numbness in the affected areas with a decreased ability to sense pain
- Desensitization in the feet and hands, unable to feel pain or change in temperature

Serious complications may develop if the condition is not managed appropriately. If you have any of the above symptoms, and you have been diagnosed with diabetes, you are at risk for diabetic neuropathy. It is important to see your medical doctor and a pain management specialist right away for assessment and treatment. Early detection of the condition can greatly reduce the symptoms you experience and slow the progression of the disease.



More serious complications can develop if you do not receive care. These complications may include:

- Bladder problems, urinary incontinence
- Uncontrolled diarrhea
- Stomach and bowel problems
- Increased sweating
- Problems regulating body temperature

- Increased heart rate

The pain can be extremely debilitating if not controlled and managed by a pain specialist. Speak to your doctor right away to discuss treatment and management of the symptoms you experience due to diabetic neuropathy. Remember, early detection is needed to help you live a quality life.

## **What are the Treatment Options for Diabetic Neuropathy?**

There are a variety of treatment options available for patients with diabetic neuropathy. Those who are in extreme pain have hope in relieving the symptoms that are preventing them from carrying out their normal activities.

With no known cause, the challenge of treating diabetic neuropathy is even greater. The primary goal for the treatment of this condition is to first get the blood sugar levels managed and then focus on painful symptoms. Reduction of pain is critical to bringing the patient's quality of life back and allowing them to be able to carry out daily activities and routines with minimal discomfort. While there are no quick remedies to improve the condition, early detection seems to be what is most effective.

### *Pharmacological Treatment Options*

Medication for pain relief is helpful for patients with diabetic neuropathy. Administering membrane-stabilizing drugs that are designed to calm down the nerve activity that causes pain can actually reduce exacerbated symptoms. While the drugs may not slow the progression of the disease, they do help reduce painful symptoms. These include medications like Lyrica and Neurontin.

Pain relievers such as NSAIDs and opioids may also provide relief from symptoms associated with the condition. Opioids are generally not the drug of choice; however, careful monitoring can relieve pain without significant side effects.

### *Additional Therapies for Pain*

Physical therapy, acupuncture and other forms of therapy are often used to treat the symptoms associated with diabetic neuropathy. Physical therapy that works with reducing pain involves active participation by the patient. Gradual and low impact exercise helps to restore strength in limbs that were otherwise debilitated by lack of use and pain. Reducing the pain levels through combination treatment of medication and other forms of treatment are often recommended.

Acupuncture is an old treatment form that is currently being recommended by doctors and pain specialists to help with diabetic neuropathy symptoms. Harvard's School of Medicine stated in 2007 that the practice of routine acupuncture treatments on patients with this condition showed signs of improved nerve sensation and function. Pain was reduced and the progression of the disease was slowed (Ahn, et al., Harvard, 2007).



### **Are There New Forms of Treatment?**

Spinal cord stimulation is one of the areas of investigation that is ongoing, yielding promising results for pain relief and the possibility of slowing the progression of this condition. Researchers are currently studying how a spinal cord stimulation implant can help reduce symptoms and delay the progress of diabetic neuropathy (Kumar, et al., Stanford Med, 2011).

A recent study out of Evansville, IN showed that spinal cord stimulation not only alleviated pain in over 80% of patients with diabetic neuropathy, but the treatment also reversed sensory loss in over 50% of patients – completely! This was an amazing finding, and very encouraging for those suffering from diabetic neuropathy.