Neurological Education - Peripheral Neuropathy

Dr. Jochims is committed to providing comprehensive care for your spine, muscle and nerve disorder. Some examples might be patients with neck and back issues, carpal tunnel syndrome, cubital tunnel syndrome, and polyneuropathy. Dr. Jochims expertly evaluates your particular case through a thorough neurological exam diagnostic neurological testing, if necessary. As a clinical neurophysiologist, he is highly skilled and trained in electro-physiological testing of diseases of the spine, muscles, and nerves. Once a diagnosis is made, a personalized treatment plan, to fit your specific needs, will be developed. By treating patients with a customized combination of medication, physical therapy, and other therapeutic approaches, we hope to maximize the available conservative approaches to treatment while avoiding the need for surgical intervention.
What is Peripheral Neuropathy?

Peripheral neuropathy is a very common disorder. It's estimated that 20 million Americans may suffer from it. It can occur at any age, however it's most common among older adults. Unfortunately, peripheral neuropathy isn't fully understood in today's medical community and it's apt to be misdiagnosed. And while it has always been present, it has not received adequate attention in the world of medical research.

There are many different causes of neuropathy. About 30% of neuropathies are idiopathic - their cause is unknown. In another 30% of cases, the neuropathy is related to diabetes. Other causes include autoimmune disease, tumors, heredity, nutritional imbalances, infections, or toxins. Some cases even develop as a result of certain cancer treatments.

In this educational material, we'll focus mainly on polyneuropathy. Neuropathy is a condition in which the peripheral nerves are damaged or not working correctly. A polyneuropathy is a neuropathy which initially begins in the feet and may progress to involve the feet, calves, and fingers/hands. The types of nerves affected can vary. If motor neurons are affected - which is less common - you'll experience weakness in affected muscles. If sensory nerves are affected, you'll experience symptoms of numbness, tingling, and even sometimes a painful burning sensation in the affected areas. Sometimes unpleasant, abnormal sensations can occur when the affected area is touched.

Often patients will describe a feeling of having socks or gloves on when their feet and hands are bare. This is referred to as stocking and glove pattern neuropathy. Proprioception (or sense of position) of your feet can eventually cause impairment. This can lead to difficulty in walking and balance concerns. Patients may find that they widen their stance or drag their feet when walking. Patients are particularly off balance in low light environments.

Common Symptoms of Peripheral Neuropathy

Symptoms can present in several different patterns. They may come and go intermittently, slowly progress over time, or may quickly become severe and debilitating. In all cases, early diagnosis and treatment is desired to avoid the possibility of permanent nerve damage. Your feet and legs are often affected first, followed by your hands and arms. Possible signs and symptoms of peripheral neuropathy include:

- Numbness or reduced ability to feel pain or changes in temperature, especially in your feet and toes
- A tingling or burning feeling
- Sharp, jabbing pain that may be worse at night
- Pain when walking
- Extreme sensitivity to the lightest touch — for some people, even the weight of a sheet can be agonizing
- Muscle weakness and difficulty walking
- Serious foot problems, such as ulcers, infections, deformities, and bone and joint pain
Diagnosis and Treatment

Diagnosis of neuropathy is accomplished by taking a thorough medical history and description of your current symptoms. A full neurological exam can also assist the physician in diagnosing your neuropathy. In some cases, diagnostic testing such as an electromyogram will be needed to help in diagnosis.

An experienced neurologist can help you manage your neuropathy; decreasing your symptoms and improving your quality of life. It's very important to seek council from a trained specialist as soon as possible. The sooner your neuropathy is treated, the better chance you have of avoiding permanent damage to your nerves.

Treatment for the particular neuropathy depends on the root cause of the neuropathy. Treat the cause and often the symptoms of neuropathy will decrease and possibly even be cured. Unfortunately, a large portion of polyneuropathy cases are idiopathic which makes it difficult to treat the underlying cause. In these cases, symptomatic treatment is used. Often medications are used to help manage the symptoms of neuropathy. Be advised that it may take time to find the right medication, or combination of medications, to handle your particular case. Physical therapy, anodyne treatment, and referral to podiatry all may be ordered as a part of your specific therapy program.

It's very important for polyneuropathy patients to be aware of their lack of foot sensation. This absence of sensation can be very dangerous because it will mask pain (which normally acts as a warning sign for injury or infection). A patient may not notice cuts or even a fracture in their foot. Therefore, cuts may become infected and fractures are less likely to be properly treated, leading to deformity and possible function impairment.

A patient with polyneuropathy should inspect his/her feet on a regular basis for any concerns. Seeing your doctor for regular foot care, nail and callous trimmings and foot inspection, is also recommended. Proper foot wear can also prevent against possible injury to your feet.

It's important to remember that research is ongoing in the field of neuropathies. This means that new methods of treatment are being developed which might help in the management of your case. New possible causes may also be discovered, which might allow previously idiopathic cases to be newly classified as having a specific cause. Regularly seeing a neurologist can keep you updated on all new advancements in this field, and undoubtedly will improve the treatment and management of your neuropathy.