FOOT NOTES

THE NEWSLETTER FOR SPRINGFIELD PODIATRY AND ACCURATE FOOT & DIABETIC CARE

November, 2022 Edition

PERIPHERAL NEUROPATHY

November is Diabetes Awareness Month, and one of the most common complications we see in our diabetic patients is peripheral neuropathy, or damage to the nerves outside of the brain and spinal cord (central nervous system). When a diabetic has elevated glucose (sugar) levels in the bloodstream over a prolonged period of time, the nerve endings become damaged. Glucose is necessary for many cells to function, and in diabetes, the insulin is not effective at putting the glucose into the cells (Type 2 diabetes), or there is not enough insulin being produced in the body to perform this necessary task (Type 1 diabetes). Without glucose for energy, the nerve cells use other sugars, such as mannitol, which eventually damage the nerve endings. Additionally, diabetics often develop microvascular disease where the smallest blood vessels, called capillaries, "clog up" and do not allow oxygen and nutrients into the cells or carbon dioxide and waste products out of the cells. This also contributes to nerve cell damage.

We have both small nerve fibers and large nerve fibers that make up the sensory nerves which provide feeling such as touch, proprioception (feeling where a body part is in space), pressure, hot/cold and vibration. When small nerve fibers are damaged, people may experience such symptoms as burning, tingling, pins and needles, electrical sensations and pain. If damage occurs to the large nerve fibers, a decrease or loss of sensation (numbness) may occur. Often, patients will experience pain *and* numbness when both large and small nerve fibers are affected.

Also affected may be the motor nerves to the small muscles of the feet which can lead to such deformities as hammertoes and bunions. If the autonomic nerves are damaged, patients may experience temperature and color changes to the feet and toes, as well as skin changes such as dry, thin skin, yellow or brown discoloration of the skin and blisters.

But there are many other causes of peripheral neuropathy, including chemotherapy, medications (such as metformin, a common diabetic medication), autoimmune disorders, cancer, chronic alcohol abuse, pressure on nerves, idiopathic (unknown) and nutritional disorders.

The pain of peripheral neuropathy is often worse at night and prevents people from falling or staying asleep. Constant pain reduces the quality of life and can be physically, mentally and emotionally debilitating. Numbness on the other hand, often affects balance, placing one at risk for falls. Additionally, people with numb feet and toes are at a high risk of injuring their feet or developing open wounds that may become infected before the person even knows the wound is present. This may lead to hospitalization, debridements and amputations, so we instruct those with numbness to carefully inspect their feet every day. Many patients with diabetic neuropathy have foot deformities and poor circulation, thereby placing them at greater risk. We prescribe and dispense diabetic shoes with specialized inserts as well as custom shoe orthotics to reduce the risk of developing wounds and infections.

Not only can peripheral neuropathy be very painful and debilitating, but it is very difficult to treat. Many people are given medications such as Neurontin (gabapentin), Lyrica (pregabalin), Elavil (amitriptyline) and Cymbalta (duloxetine) for the nerve pain. While these may be helpful at reducing the pain, pins and needles, tingling and electrical sensations, they may also have unpleasant side effects. Other options are pain relievers such as acetaminophen, ibuprofen and narcotics that can provide some relief, but these have potential side effects as well. Prescription compounded pain medications are topical creams that can lessen some of the painful symptoms of peripheral neuropathy without unwanted side effects.

Medications can be very helpful for some people to reduce pain and increase function, but the potential side effects may make some of them difficult for

people to take. Furthermore, these products block the pain sensations but no not actually treat and repair the nerve damage. Fortunately, there are treatment options that can help to repair the damaged nerves, reverse some or all of the painful symptoms, and slow or stop the progression of peripheral neuropathy. This involves **regenerative medicine** and includes such therapies as Class IV laser therapy, EPAT (Extracorporeal Pulse Activation Technology), amnion placental fluid injections, and prescription supplements called medical foods.

The most important thing someone with peripheral neuropathy can do is to address the underlying cause of the neuropathy. For the diabetic person, that means controlling the blood sugar levels. For other conditions, one should stop drinking alcohol, treat the autoimmune disease, undergo surgery to remove pressure on the nerve, improve the diet, etc.

If you or someone you know is experiencing some of the symptoms described, please see us ASAP for an evaluation and discussion of your options *before* problems arise.

PERSONALLY SPEAKING

We have a new Receptionist in the West Chester office! Lynda has recently joined our team. Born and raised in West Chester, Lynda is a graduate of Henderson High School, as were her parents and her children. She has three grown sons and two granddaughters. Lynda is enjoying buying "girl clothes" for them. Her hobbies include reading and spoiling her grandchildren. Working at Accurate Foot & Diabetic Care has enlightened her as to what goes on behind the scenes in a medical office. She enjoys working with our team member as everyone pulls together as supports each other. Please be sure to welcome Lynda to our practice at your next visit! (And ask to see pictures of her beautiful granddaughters.)

MYTH BUSTER

"Your feet don't change once you are an adult." Not true! Feet definitely change over the course of your life. For example, arches can get lower or higher and the front of the foot can spread.

FUN FACTS

The first Thanksgiving took place in 1621, and the foods eaten have not changed much since then. Every Thanksgiving, the current U.S. President pardons a turkey while Americans eat over 280 million turkeys on Thanksgiving day. That's one lucky bird to be pardoned!

WHAT'S NEW

As mentioned in our September Foot Notes, we have implemented a new service called **EBM Medical** that allows us to prescribe a wide variety of medical food supplements for a multitude of conditions. These pharmaceutical grade medical food supplements are much stronger and more effective than over the counter preparations and can help with pain due to arthritis, tendonitis, injuries, neuropathy and nerve pain, etc. The prescription orders are placed the day of your visit, and the company will send the products directly to your home with full instructions for use. They will also handle automatic refills. Please ask our doctors if one of these excellent products can help you!

QUOTES

"Not what we say about our blessings, but how we use them, is the true measure of our Thanksgiving." - W. T. Purkiser

PUNNY STUFF

My family told me to stop telling Thanksgiving jokes, but I told them I couldn't quit "cold turkey."

PUZZLE:

Call today for your foot health evaluation!

In Drexel Hill, call 484-521-0233

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In West Chester, call 610-436-5883 (accpodiatry@gmail.com)

Or visit us at www.drsiegerman.com

Dr. Julie Siegerman and Dr. Danielle Seiler

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