

Peripheral Vascular Disease and the Feet

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How far can you walk without pain in your legs? A hundred miles? A mile? A few blocks? Less than one block?

Perhaps you have sores on your toes, feet or legs that won't heal? Or, the hair on your legs and feet has been decreasing over the years? Maybe the skin on your legs has become shiny and tight? These along with finding black or blue marks on your feet or toes without any history of injury and night or resting cramps in your legs can be signs and symptoms of P.V.D..

What is P.V.D.? The initials are short for peripheral vascular disease. This is the medical term for poor circulation in your legs, toes or feet and can also affect the hands and fingers. One of the main reasons for P.V.D. is called atherosclerosis or arteriosclerosis. This condition is commonly known as "hardening of the arteries" and can affect your extremities just like it can the heart.

In most cases there is a gradual progression of plaque development, thickening of the arteries (the vessels that take blood from your heart to your feet and other parts of your body), hardening of the vessels and a loss of the general elasticity that aids in pumping the blood throughout your system. There can also be blockage of the vessel walls if too much plaque develops and narrowing of the vessels if there are repeated spasms of the vessels.

There are many factors why these symptoms can occur. Diabetes is a primary cause with a buildup of excess sugar in the system and oftentimes earlier changes in the vessel walls that can even be seen on x-rays. When the vessels become calcified, the blood has to work harder to get through the system, and this is known as sclerosis of the arteries.

Additional risk factors include smoking, heart disease, high blood pressure, high cholesterol levels, obesity and a family history of vascular disease.

Peripheral vascular disease, and especially blocked arteries are usually diagnosed by obtaining a Doppler lower extremity arterial flow study. This is a non-invasive test that measures the pressures at different levels in your legs and it is compared with your brachial (arm) pressure. Ideally this number should be "1." If it is lower it means that the blood is not flowing as freely as it should. If the number is higher, it generally indicates that there is calcification of the arteries and the vessels cannot compress as easily as they should.

There are many new treatments for P.V.D. including medications that make the blood more elastic, thereby allowing it to flow through the tighter vessels easier. There are standard surgical procedures including bypass surgery and an atherectomy (removal of plaque or a blockage) with or without a stent.

The most recent development is a minimally invasive procedure involving the use of the SilverHawk technique. This is a small rotating blade that is inserted through a small incision. The placement is aided with the use of x-ray imaging and removes the plaque without having to "open up" the leg. The recovery is generally much faster and the procedure can be done as an out-patient in many cases. This procedure in early trials has shown excellent success when the disease is diagnosed before severe symptoms develop.

If you are having any of the above symptoms, including cold or numb feet, burning feet, pain in the calf muscles even when walking a short distance (known as intermittent claudication), wounds that won't heal, and night cramps among others, please contact your podiatrist or family doctor.

These doctors can help in screening for this disease, ordering the determining tests, prescribing either lifestyle changes (when the condition is not as severe), prescribing medications to assist blood flow, or referring you to a vascular surgeon who can aid in restoring your blood flow. Early detection is the key to preventing more severe problems from developing.