



Your Health - by Dr. Rallie McAllister

Published 02/28/2010 - 11:15 p.m. CST

Activity-Related Leg Pain Could Be a Sign of Heart Disease

If you routinely experience leg pain while walking, you shouldn't dismiss it as just a muscle cramp or a joint ache. It could be a sign of peripheral artery disease, a serious condition that affects approximately 10 million Americans.

Peripheral artery disease, or PAD for short, is a condition in which narrowed arteries impair blood flow to the limbs, particularly the legs. When the leg muscles don't receive enough oxygen-rich blood to keep up with the demands of exercise, pain is often the result.

Activity-related leg discomfort caused by PAD is known as intermittent claudication, derived from the Latin word meaning "to limp." It is characterized by muscle pain or cramping in the legs that is triggered by exercise, such as walking or climbing stairs, and disappears after a few minutes of rest.

The location of the leg pain or cramping corresponds to the narrowed artery. Although PAD-associated leg discomfort may be felt in the thigh or the buttock, the calf muscle is most commonly affected.

In some cases, the affected leg or foot may feel cold, weak or numb. Individuals with PAD often notice changes in skin color and toenail growth, as well as a loss of hair on the feet and lower legs.

As the condition progresses, the pain may become more intense and unrelenting, even at rest. Infections and slow-healing sores may develop on the legs, feet and toes.

While the pain and visible changes may be limited to the lower extremities, PAD is considered a red flag for circulatory problems that are far more widespread.

The narrowing of the arteries that occurs with PAD is caused by the accumulation of fat, cholesterol and other inflammatory substances in the blood vessel walls. Unfortunately, this process isn't limited to the arteries of the legs — it often occurs simultaneously in the blood vessels leading to the heart and brain.

Narrowing of the arteries that supply oxygen-rich blood to the heart and brain can lead to heart attack and stroke. A growing body of scientific evidence suggests that a significant percentage of individuals with PAD also have coronary artery disease, the most common type of heart disease and the leading cause of death in the U.S.

Risk factors for PAD and heart disease are the same: smoking, high blood pressure, high cholesterol levels, diabetes and advancing age.

If you have signs or symptoms of PAD, your doctor can perform several noninvasive tests to diagnose the condition.

A physical examination may reveal telltale signs, including a weak or absent pulse or a lower blood pressure reading in the affected limb.

Ultrasound imaging may be used to evaluate blood flow to the limb and identify narrowed arteries. For some patients, physicians may recommend angiography, a test that involves injecting contrast dye into the blood vessels so that narrowed or blocked arteries can be identified using X-ray or other radiologic imaging techniques.

When narrowing or blockage of an artery is identified, treatment may involve angioplasty, a procedure in which a hollow tube, called a catheter, is inserted into an artery in the groin and then guided to the affected area. There, a small balloon on the tip of the catheter is inflated to flatten the blockage and widen the artery so that blood flow is increased.

The specialist performing the procedure may also insert a mesh tube, called a stent, in the artery to help hold it open. In more severe cases, surgery may be necessary.

For some individuals with PAD, prescription medications are recommended to improve blood flow and lower

blood pressure and cholesterol levels. Almost everyone with the condition can benefit from positive lifestyle changes, starting with switching to a heart-healthy diet.

If you smoke, quitting is the single most important step you can take to reduce the progression of the disease, and for folks with diabetes, maintaining good control over blood sugar is critical. People who smoke and those with diabetes have the greatest risk of PAD-related complications that can necessitate limb amputation.

Regular exercise is a key component in the prevention and treatment of PAD. Success of treatment is typically measured by how far patients can walk without experiencing leg pain.

If you have activity-related leg pain or other symptoms of PAD, it's time to take them seriously. Early diagnosis and treatment can improve the health of your limbs, and it might even save your life.

Rallie McAllister, M.D. is a family physician, speaker, and co-founder of www.MommyMDGuides.com, a website featuring child-raising tips from trusted doctors who are also moms.