

# All About Claudication

## **What is claudication?**

*Claudication* is pain in the calf or thigh muscle that occurs after you have walked a certain distance, such as a block or two. The pain stops after you rest for a while. Each time the pain occurs during walking, it takes about the same amount of time for the pain to go away after you stop walking. If you notice pain in your legs after you walk a block or more, you may have claudication.

## **What causes claudication?**

Claudication occurs when not enough blood is flowing to a muscle. The artery that normally supplies blood to the muscle gets narrow, and less blood can flow through the artery. When you're resting, enough blood flows to the muscle to meet the needs of the muscle. However, when you exercise (walk), the blood flow may not be enough to meet the needs of the working muscle.

## **What causes the leg arteries to get narrow?**

*Atherosclerosis* causes the arteries in the legs to become narrow. With atherosclerosis, fatty material builds up in the walls of the artery. This fatty material causes narrowing of the artery. Health conditions such as high blood pressure, diabetes, a high cholesterol level and cigarette smoking may cause you to have atherosclerosis.

## **Who is at risk of getting claudication?**

Risk factors for claudication include high blood pressure, diabetes, a high cholesterol level, cigarette smoking and older age. Claudication is also more likely to occur in people who already have atherosclerosis in other arteries in the body, such as the arteries in the heart or brain. People with claudication may have a history of heart attack or stroke.

## **How does my doctor know I have claudication?**

Your doctor checks the pulses in the arteries in your legs. He or she may use a stethoscope to listen to the sound of your blood going through your arteries. Your doctor may hear a noise in an artery, called a *bruit*, which may be a warning to your doctor that there is a narrow area in the artery.

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**Are special tests helpful?**

Your doctor may order a test to check the blood flow in your leg arteries. This test is often performed in a hospital laboratory.

The test for checking the blood flow in your legs is called a *Doppler study*. With this test, blood pressure cuffs are wrapped around both your arm and your leg on the same side. The kind of cuff put on your leg is the same kind of cuff that's wrapped around your arm when your blood pressure is measured. Four cuffs are wrapped around your leg—one at the upper thigh, one at the lower thigh, one at the upper calf and one at the ankle—to measure the blood pressure from the top of your leg to your ankle. A cuff is also wrapped around your upper arm to measure the blood pressure in your arm. The blood pressure in your arm is compared with the blood pressures in your leg. A drop in the blood pressure in your leg may mean narrowing of an artery.

**What other tests might be done?**

If surgery might help treat the symptoms of claudication, your doctor may recommend an *arteriography*. This is an x-ray taken after dye is put into an artery. The dye study may show narrowing in an artery and provides a “map” for the surgeon who will do the surgery.

**Can anything be done to treat the symptoms of claudication?**

Yes. There are three steps in treatment. First, change your lifestyle to reduce risk factors for claudication. If you smoke, it's very important to stop. It's also important to lower your cholesterol level and blood sugar level (if you have diabetes).

An exercise program, such as walking or stair climbing, is also helpful. Begin exercising slowly and gradually increase the time you spend exercising. You may see improvement in your symptoms within two months. To begin an exercise program, exercise each day for 30 to 60 minutes. If claudication (pain in your legs) occurs while you're exercising, stop and rest until the pain is gone, and then start to exercise again.

**Can medicine help claudication?**

Pentoxifylline (Trental) may help your claudication. It's taken for one to three months only.



This handout provides a general overview on this topic and may not apply to everyone. To find out if this handout applies to you and to get more information on this subject, talk to your family doctor.

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