

Peripheral Arterial Disease

What is peripheral arterial disease?

Peripheral Arterial Disease (PAD) occurs when the arteries that carry blood to the legs become narrow or blocked because of the buildup of plaque. **Plaque** is made up of fat, cholesterol, and other substances found in the blood.

People with peripheral arterial disease may also hear the terms: Peripheral Vascular Disease (PVD) or Peripheral Vascular Occlusive Disease (PVOD). Peripheral arterial disease usually affects the arteries in your legs but it can also affect the arteries that carry blood from your heart to your head, arms, kidneys, and stomach. These terms are a more generalized to include all of these arteries.

What are the symptoms of peripheral arterial disease?

Common PAD symptoms include:

- Lasting or occasional calf or thigh pain (this is called claudication) or cramping that becomes worse with walking
- Sores on your toes, feet, or legs that heal slowly or won't heal
- Foot pain when resting
- Numbness or loss of sensation in your leg
- A change in the color of your leg, especially when compared to the other leg
- Coldness in your lower leg or foot, especially when compared to the other leg
- Hair loss or slower hair growth on your feet and legs
- Slower toenail growth

How is peripheral arterial disease diagnosed?

Your doctor will diagnose peripheral arterial disease based on your medical history, a physical exam and test results. The following tests are common for diagnosing carotid artery disease:

- Ankle Brachial Pressure Index (ABI)- This is a common test used to diagnose PAD. It compares the blood pressure in your arms with the blood pressure in your ankles.
- Ultrasound- This test uses sound waves to create pictures of your arteries. It
 helps your doctor to see how the blood is moving through your arteries and
 can show any blockages caused by plaque deposits.
- Computer Tomography Angiogram (CTA) –is a special type of x-ray. For this test, your doctor will inject a substance (called contrast dye) into a vein. The dye travels to your arteries and highlights them so they show up on x-ray pictures. This test helps determine if plaque buildup has narrowed your arteries and may be needed as an additional test.
- Magnetic Resonance Angiography (MRA)-this test uses a strong magnet to take pictures of your arteries to determine if there is plaque buildup within your arteries. This test may be needed as an additional test or if you have an allergy to IV contrast dye.

How is peripheral arterial disease treated?

Treatments include making lifestyle changes, taking medications or undergoing medical procedures. Your doctor will talk to you about your specific treatment options.

Lifestyle changes include:

- Quitting smoking
- Eating foods low in saturated fats, cholesterol and sodium
- Controlling your blood pressure
- If you have diabetes, see your health care provider regularly and follow all diet and medication instructions.
- Maintaining a healthy weight
- Exercising daily
- Managing stress

Medications:

Your doctor may give you prescription medications to help prevent blood clots which will lessen your chance for stroke. Common medications are:

- Medication to prevent blood clots:
 - o Aspirin
 - Clopidogrel (Plavix®)
- Cholesterol-lowering medications (Statins)
- High blood pressure medications
- Medication to control your blood sugar

Medical Procedures:

If your disease is severe enough, your doctor may recommend angioplasty or surgery to treat your case.

- Angioplasty and stenting- is used to widen the artery and restore normal blood flow. A thin tube with a deflated balloon on the end is guided to the blocked artery. Once in place, the balloon is inflated to push the plaque against the artery wall. A small wire mesh coil (stent) may then be put into the artery to keep the artery open.
- Bypass Surgery- This procedure creates a bypass or detour around the narrowed or blocked part of your artery. To create a new route for blood to flow, one of your veins or a synthetic tube (known as graft) is sewn above and below the blocked area.

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