



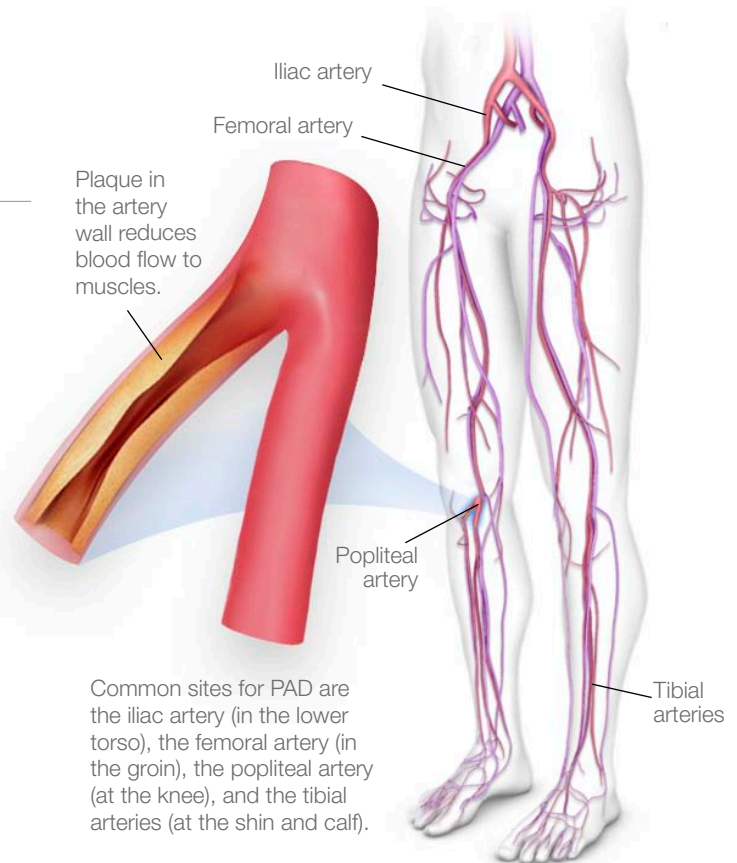
What Is Peripheral Vascular Disease?

Peripheral vascular disease (PVD) refers to diseases of blood vessels outside the heart and brain. It's often a narrowing of vessels that carry blood to the legs, arms, stomach or kidneys.

There are two types of PVD:

- **Functional PVDs** don't involve defects in blood vessels' structure. (The blood vessels aren't physically damaged.) These diseases often have symptoms related to "spasm" that may come and go.
- **Organic PVDs** are caused by structural changes in the blood vessels. Examples could include inflammation and tissue damage.

Peripheral artery disease (PAD) is a type of organic PVD. It's caused by fatty buildups (atherosclerosis) in the inner walls of arteries. These deposits block normal blood flow.



Is peripheral artery disease dangerous?

Yes. In PAD, fatty deposits build up in the inner lining of artery walls. These blockages restrict blood flow, mainly in arteries leading to the kidneys, stomach, arms, legs and feet. Left untreated, PAD can lead to gangrene and amputation of limbs. If the blockage occurs in a carotid artery, it can cause a stroke. Most patients with PAD have a higher risk of death from heart attack and stroke.

What are the symptoms?

In its early stages, common symptoms of poor leg circulation are cramping, fatigue, heaviness, and pain or discomfort in the legs and buttocks during activity. This usually goes away when the activity stops. It's called "intermittent claudication."

Symptoms of poor kidney circulation include sudden high blood pressure, or blood pressure that is hard or impossible to control with medications. Severe blockage of the kidney arteries may result in loss of kidney function or failure.

How is PAD diagnosed?

Diagnosing PAD begins with a medical history and physical exam. In the exam, your doctor can do a simple test called the ABI (ankle brachial index). After that, other tests may be done. They include:

- Doppler and duplex ultrasound imaging
- magnetic resonance angiogram (MRA)
- CT angiogram
- regular (catheter-based) angiogram

(continued)



How is PAD treated?

Most people with PAD can be treated with lifestyle changes, medicines or both. Lifestyle changes to lower your risk include:

- stopping smoking (smokers are 4 times more likely to get PAD and have symptoms of PAD than nonsmokers.)
- controlling diabetes
- controlling blood pressure
- being physically active (including a supervised exercise program)
- eating a diet low in saturated and *trans* fats

PAD may require drug treatment, including:

- antiplatelet agents to prevent blood clots
- cholesterol-lowering medicine (statins)
- high blood pressure medicine

Lifestyle changes (including an exercise program) usually improve symptoms or keep them from getting worse. In some patients, lifestyle changes

and medication aren't enough. Then angioplasty or bypass surgery may be needed.

Angioplasty is a non-surgical procedure that widens narrowed or blocked arteries. A thin tube (catheter) with a deflated balloon on its tip is passed into the narrowed artery segment. Then the balloon is inflated. This pushes open the narrowed segment. Then the balloon is deflated and the catheter is withdrawn. Often a stent (a wire mesh tube) is placed in the narrowed artery with a catheter. There the stent expands and locks open. It stays in that spot, keeping the diseased artery open.

If a long part of an artery is narrowed, bypass surgery may be needed. A vein from another part of the body or a synthetic blood vessel is attached above and below the blocked area to detour blood around the blocked spot.

HOW CAN I LEARN MORE?

- 1 Call **1-800-AHA-USA1** (1-800-242-8721), or visit **heart.org** to learn more about heart disease and stroke.
- 2 Sign up to get *Heart Insight*, a free magazine for heart patients and their families, at **heartinsight.org**.
- 3 Connect with others sharing similar journeys with heart disease and stroke by joining our Support Network at **heart.org/supportnetwork**.

Do you have questions for the doctor or nurse?

Take a few minutes to write your questions for the next time you see your healthcare provider.

For example:

Should I be checked for PVD?

My Questions:

We have many other fact sheets to help you make healthier choices to reduce your risk, manage disease or care for a loved one. Visit **heart.org/answersbyheart** to learn more.