

✓ *Peripheral artery angiogram and stenting*

What is peripheral vascular disease?

This 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 these circulation disorders:

- **Functional** peripheral vascular diseases don't have an organic cause. They don't involve defects in blood vessels' structure. They're usually short-term effects related to "spasm" that may come and go. Raynaud's disease is an example. It can be triggered by cold temperatures, emotional stress, working with vibrating machinery or smoking.
- **Organic** peripheral vascular diseases are caused by structural changes in the blood vessels, such as inflammation and tissue damage. Peripheral artery disease is an example. It's caused by fatty buildups in arteries that block normal blood flow.

What is peripheral artery disease?

Peripheral artery disease (PAD) is a condition similar to coronary artery disease and carotid artery disease. In PAD, fatty deposits build up in the inner linings of the artery walls. These blockages restrict blood circulation, mainly in arteries leading to the kidneys, stomach, arms, legs and feet. In its early stages a common symptom is cramping or fatigue in the legs and buttocks during activity. Such cramping subsides when the person stands still. This is called "intermittent claudication." People with PAD often have fatty buildup in the arteries of the heart and brain. Because of this association, most people with PAD have a higher risk of death from heart attack and stroke.

How is peripheral artery disease diagnosed and treated?

Techniques used to diagnose PAD include a medical history, physical exam, ultrasound, X-ray angiography and magnetic resonance imaging angiography (MRA).

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

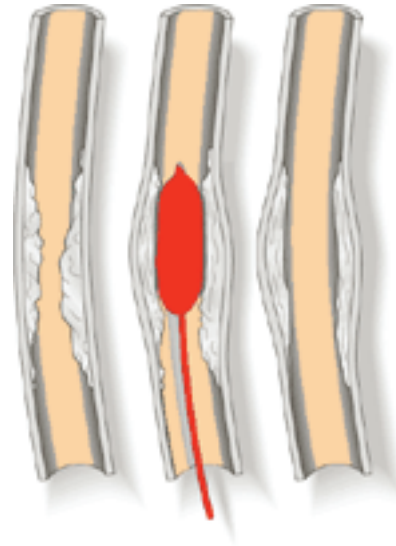
- Stop smoking (smokers have a particularly strong risk of PAD).
- Control diabetes.
- Control blood pressure.
- Be physically active (including a supervised exercise program).
- Eat a low-saturated-fat, low-cholesterol diet.

PAD may require drug treatment, too. Drugs include:

- medicines to help improve walking distance
- antiplatelet agents.
- cholesterol-lowering agents (statins).

In a minority of patients, lifestyle modifications alone aren't sufficient. In these cases, angioplasty or surgery may be necessary.

Angioplasty and stenting - Interventional cardiologists pioneered angioplasty and stenting, which was first performed to treat peripheral arterial disease. Using imaging for guidance, the interventional cardiologist threads a catheter through the femoral artery in the groin, to the blocked artery in the legs. Then the interventional cardiologist inflates a balloon to open the blood vessel where it is narrowed or blocked. In some cases this is then held open with a stent, a tiny metal cylinder. This is a minimally invasive treatment that does not require surgery, just a nick in the skin the size of a pencil tip.



Angioplasty