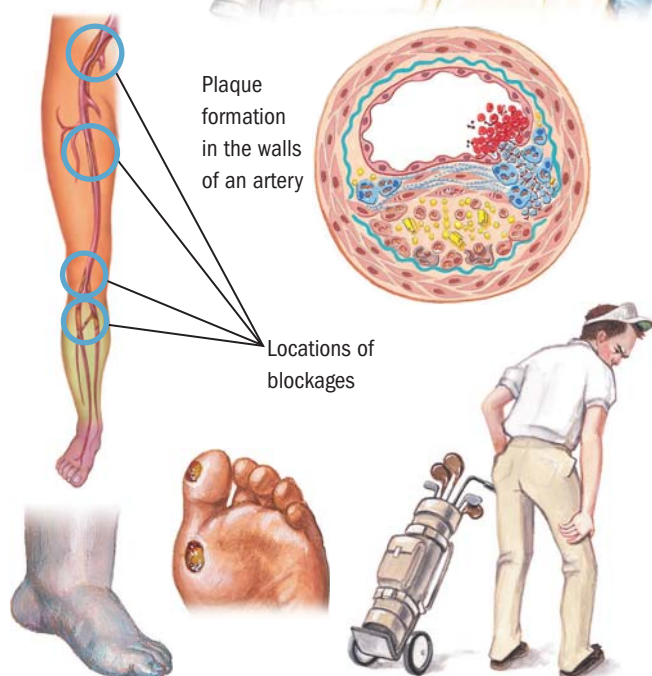


# MANAGING YOUR PERIPHERAL ARTERIAL DISEASE

Peripheral arterial disease (PAD) refers to blockage of leg arteries by atherosclerosis, so legs have poor blood flow. In atherosclerosis, cholesterol plaques block arteries. PAD occurs in men and women equally.



*F. Netter M.D.*

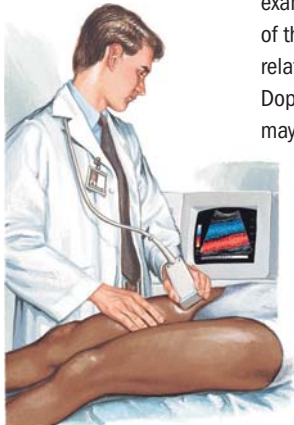


Plaque formation in the walls of an artery

Locations of blockages

About half of people don't have symptoms, but the most common ones are pain, cramping, aching, and numbness. Others are heavy or tight feeling, cold skin, pale or bluish skin, and ulcers that don't heal.

Doppler ultrasound



Your doctor makes a diagnosis from a physical examination, fasting blood tests, and measures of the ankle-brachial index (ABI), which is related to blood pressure. A treadmill test, Doppler ultrasound, angiography, and MRA may also be done.

Treadmill test



## What Is Peripheral Arterial Disease (PAD)?

Peripheral arterial disease (PAD) refers to blockage of leg arteries by atherosclerosis (hardening of the arteries), so legs have poor blood flow. In atherosclerosis, cholesterol plaques block arteries. PAD occurs in men and women equally. It likely affects 8 to 10 million people in the United States.

## What Causes PAD?

Fatty deposits build up inside arteries and make them narrower. Tobacco, diabetes, cholesterol, and high blood pressure make PAD likely. PAD isn't contagious or passed from parents to children.

## What Are the Symptoms of PAD?

About half of people don't have symptoms. The most common symptoms are pain, cramping, aching, and numbness in the affected area. Others are heavy or tight feeling, cold skin, pale or bluish skin, pulse that's hard to feel, and sores or ulcers that don't heal. Aching or cramping leg pain often occurs during exercise and goes away during rest (intermittent claudication). If blood flow is completely blocked, the leg gets very painful and hard to move. In men, impotence can occur if vessels leading to the penis are affected.

## How Is PAD Diagnosed?

The doctor makes a preliminary diagnosis from your symptoms, a physical examination, fasting blood tests, and by measuring the ankle-brachial index (ABI). The doctor gets the ABI by dividing the highest ankle blood pressure by the highest arm blood pressure. ABI values less than 1 are abnormal.

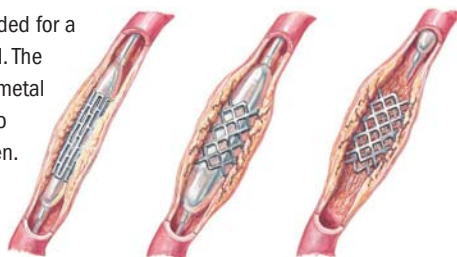
A treadmill test, Doppler ultrasound, angiography (a kind of x-ray with dye), and magnetic resonance angiography (MRA) may also be done to evaluate the extent of the disorder and areas of blockage.

## MANAGING YOUR PERIPHERAL ARTERIAL DISEASE



Treatment aims to reduce pain and prevent damage to the leg. Risks of getting a future heart attack or stroke must be lowered. Life-style changes are critical. Medicines can help blood flow, thin blood, dissolve clots, lower blood pressure, and lower cholesterol levels.

Angioplasty may be needed for a severely narrowed vessel. The doctor may put a small metal or mesh tube (stent) into the vessel to keep it open.



Lifestyle changes to control cholesterol, diabetes, and hypertension and to avoid tobacco are critical. Lose weight and get active. Walk for 20 to 30 minutes daily. Eat a heart-healthy diet.



Stop smoking! Smoking is the biggest single risk factor for PAD and a major risk factor for heart attack and stroke.



Take care of your feet. Examine them regularly, and avoid getting cuts or blisters. Call your doctor if you have a foot ulcer that doesn't heal.

### FROM THE DESK OF

#### NOTES

### How Is PAD Treated?

Treatment goals are to reduce pain and prevent damage to the affected area. Measures include avoiding tobacco, eating a healthy diet, and restricting salt. Diabetics should follow the American Diabetes Association (ADA) diet. Exercise such as walking 30 to 60 minutes per day helps walking distance and quality of life.

Medicines can help blood flow, thin blood, dissolve clots, lower blood pressure, and lower cholesterol levels.

The doctor may suggest angioplasty for a severely narrowed vessel. The doctor puts a wire (catheter) into the artery and inflates a tiny balloon to open the blocked artery. The doctor may put a small metal or mesh tube (stent) into the vessel to keep it open.

People sometimes need bypass surgery to get around the blockage. A procedure called percutaneous atherectomy can also be performed to remove the blockage by inserting a "plaque-eating" device in the blocked artery and shaving off the plaque. In the most advanced stages, PAD may lead to amputation.

### DOs and DON'Ts in Managing PAD:

- ✓ **DO** understand that lifestyle changes for cholesterol, diabetes, hypertension, and tobacco are critical.
- ✓ **DO** eat a healthy diet, with less fat, especially saturated fat, and less salt. Eat plenty of fruits, vegetables, and whole-grain cereals.
- ✓ **DO** lose weight.
- ✓ **DO** get active. Walk for 20 to 30 minutes daily.
- ✓ **DO** take extra care with controlling your blood sugar if you have diabetes.
- ✓ **DO** take care of your feet. Examine them regularly, and avoid getting cuts or blisters. Call your doctor if you have a foot ulcer that doesn't heal.
- ⊘ **DON'T** smoke. Smoking is the biggest single risk factor for PAD and a major risk factor for heart attack and stroke.

### FOR MORE INFORMATION

#### Contact the following sources:

- The National Heart, Lung, and Blood Institute  
Tel: (301) 592-8573  
Website: <http://www.nhlbi.nih.gov>
- American Heart Association  
Tel: (800) 242-8721  
Website: <http://www.americanheart.org>