What You Need to Know About Peripheral Artery Disease (PAD)



What Is Peripheral Artery Disease (PAD)?

PAD is a health problem in which the arteries in the arms and legs become clogged with fats and other materials in the bloodstream. This narrows the arteries and reduces the flow of blood to the limbs.

PAD is most common in:

- Older people
- Smokers
- Obese people
- People who have high levels of fats and cholesterol in their bloodstream
- People with high blood
 pressure
- People who have high blood sugar levels



Several of these conditions can damage the inner layers of the arteries and lead to PAD.

PAD is a serious problem that should be diagnosed and treated by a medical professional. Left untreated, PAD can lead to tissue death, loss of limbs (amputation), heart attack, or stroke.

PAD is more common among women than men, in part because women tend to live longer and are more likely to be obese. African-American, American Indian, Hispanic/ Latina, and Asian/Pacific Islander women have a higher prevalence (2 to 4 times higher than Caucasian women) of diabetes, for example, which is one of the major risk factors for PAD.

PAD and Women

Women are more likely to have PAD than men are, so women in particular need accurate, timely, and proactive information about the condition.

PAD raises the risk of getting coronary heart disease, heart attack, stroke, and transient ischemic attack (TIA, sometimes called "mini-stroke").

Having PAD increases the risk of a heart attack fivefold and raises the risk of stroke two- to threefold.

It's unclear why women aren't more aware of PAD and its effects. It may be that differences between how men and women experience PAD (especially women who've been through menopause) could explain part of that. Another possible reason is that women aren't involved in clinical trials to the extent that men are. This could result in differences between the genders in how PAD is diagnosed and measured and in turn, increase the disparity in how men and women are treated.



What Causes PAD

Atherosclerosis is the process in which the arteries become clogged and hardened because of the buildup of **plaque** on their inner walls. The plaque is made up of fat, cholesterol, calcium, fibrous tissue, other substances in the bloodstream, or any combination of these.

The body tries to heal the damaged arteries with healthy tissue, but the plaque gets in the way and causes the tissue to deposit in the plaque, making things worse.



Symptoms of PAD

Many people with PAD have no symptoms at all. In fact, it's estimated that up to half of all people with PAD have no symptoms. But among those who do, the symptoms can include:

- Leg muscle fatigue
- Cramping
- Pain in the affected limbs
- Sores or wounds on the toes, feet, or legs that heal slowly, poorly, or not at all

PAD is a common heart and blood vessel (cardiovascular) disease in developed countries, yet many people are not aware of it. One research study found that among the general public (in particular, nonwhite, less-educated, lower-income people), the causes of PAD were generally unknown. Among those somewhat aware of PAD, only 44% knew that smoking causes PAD, and only 50% knew that diabetes is an important cause of PAD.

People who were familiar with PAD were still unaware of its possible consequences. Only 28% knew it could lead to a heart attack or stroke, and only 14% knew that PAD could lead to amputation.

Diagnosing PAD

To see if a person has PAD, a health care provider will likely conduct a test called an ankle-brachial index (ABI). This is a painless, easy test that compares the blood pressure readings of the ankles to those of the arms. If the ratio is less than 0.90, PAD is the usual diagnosis.

From there, further testing may be necessary to pinpoint which arteries are affected by PAD and how blocked they are.

ABI can be very useful in detecting PAD among adults who don't have symptoms. But widespread screening of adults without symptoms is discouraged because falsepositive results are possible. This could lead to unneeded treatments and excess testing. The U.S. Preventive Services Task Force concluded that there is not currently enough medical information to assess the relative benefits and harms of ABI screening.

At present, there are no randomized clinical trials that show added benefits to more widespread PAD screening. For this reason, health care providers tend to be cautious about using the test to diagnose PAD in people without symptoms.

Preventing PAD

The best way to avoid the consequences of PAD is to avoid PAD in the first place. You can help do this by:

- Eating a heart-healthy diet
- Getting plenty of regular physical activity (preferably aerobic exercise)
- Quitting smoking
- Losing weight if you're overweight or obese
- Taking aspirin to prevent cardiovascular disease
- Sticking to your treatment plan for diabetes, high blood pressure, and high cholesterol if you have any of these conditions













Treating PAD

If you are diagnosed with PAD, the first step in your treatment plan will likely be blood thinners and other drugs that will help lower blood pressure and cholesterol. Guidelines from the American College of Cardiology and American Heart Association recommend 75 mg to 325 mg per day of aspirin, or 75 mg per day of clopidogrel, for people who have PAD with symptoms in order to reduce the risk of heart attack, stroke, or other vascular death.

However, **low-dose aspirin is not recommended for people who have PAD without symptoms and those who have low ABI scores**. The reason for this is that aspirin does not improve the health outcomes for people in these groups and can even increase bleeding among them. That's not true of clopidogrel, however, which is recommended for the treatment of PAD in patients without symptoms to reduce the risk of heart attack, stroke, or other vascular death.



