

Patient information from BMJ

Last published: Sep 27, 2021

Peripheral arterial disease

Peripheral arterial disease means that not enough blood is getting to your legs. This can cause pain when you walk.

What is peripheral arterial disease?

If you have peripheral arterial disease (PAD for short), the blood vessels (arteries) that carry blood around your body have become too narrow. When the arteries taking blood to your legs are too narrow, not enough oxygen and nutrients get to your muscles or skin. If you don't have treatment this can damage your legs.

Arteries become narrow when clumps of fat (called plaques) build up inside the artery wall. If the plaques break off they can cause blood clots that block the artery.

If the arteries in your legs are narrow, other arteries to your heart and brain may also be too narrow. This increases your chance of a heart attack or stroke.

You are more likely to get PAD if you smoke or if you have diabetes. Other things that make it more likely are:

- being older
- having high blood pressure
- having high cholesterol
- being overweight, and
- not taking much exercise.

What are the symptoms?

At first you may not know there is anything wrong. Many people with PAD don't get any symptoms and don't know that they have it. But as your PAD gets worse you might get aches or cramps in your calf, thigh, foot, or buttock when you walk.

Doctors call this intermittent claudication.

If your PAD gets more severe:

Peripheral arterial disease

- you might have pain in your legs even when you're sitting down
- you might have cuts, bruises, or ulcers on the skin of your legs or feet that don't heal properly, and
- your feet might change colour.

People with very severe PAD may need to have the limb amputated.

Your doctor will ask about your symptoms, examine you, and take your blood pressure. He or she will also check your pulse at different points on your body including your knee, ankle, and foot.

If your doctor is not sure whether you have PAD, you'll be referred to a specialist for more tests.

What treatments work?

There are many treatments that can help improve your symptoms and reduce your chances of getting other health problems. You will probably need to take medicines every day for the rest of your life. There are also things you can do to help yourself.

Things you can do for yourself

Taking regular exercise (at least three times a week) should help you to be able to walk further and exercise for longer before you get leg pain. Exercising can improve the blood supply to your legs and help the muscles of your legs to work more efficiently.

Your doctor can advise what exercise is best for you. You might be put on an exercise programme when you first get PAD, to help relieve your symptoms.

Stopping smoking is very important. People with PAD who stop smoking are less likely to die early, have a heart attack, or need to have a limb amputated.

Keeping warm is important, because cold constricts your blood vessels. Don't use decongestant medicines for colds and hay fever.

If you have PAD and diabetes, you need to take your diabetes medicines as agreed with your doctor, and take good care of your feet. You should see a podiatrist regularly to check your feet.

Medicines

Antiplatelet medicines include aspirin and clopidogrel. These drugs reduce the chance of blood clots forming in your arteries by making your blood less sticky. They also make it less likely that you will have a heart attack or stroke, die early, or need an operation to unblock an artery in your leg.

The most common side effect of antiplatelet medicines is bleeding.

As well as antiplatelet medicines, you are likely to need medicines to lower your blood pressure. There are many types and you can discuss with your doctor which is right for you.

Peripheral arterial disease

Taking medicines called statins to reduce your cholesterol might stop your PAD getting worse. These medicines can help reduce the build-up of plaques in your arteries. People with PAD who take statins are less likely to have a heart attack or stroke or to die early.

If drug treatments and exercise don't reduce your symptoms, and you have trouble walking, you might be offered drugs called vasodilators that can relax your blood vessels. They might help you to walk further without pain.

Surgery

If the arteries to your leg get very narrow, you might need an operation to widen them or to bypass the most damaged parts.

In an operation called percutaneous transluminal angiography (also known as angioplasty or PTA), a doctor uses a tiny balloon to widen the part of your artery that is blocked. He or she might then insert a small tube, called a stent, into the artery to try to keep it open.

Another possible treatment is bypass surgery. This means taking a small piece of a healthy vein from your leg, or using an artificial vein, and stitching it into your damaged artery, so that blood can pass through.

Like any surgery, both types of operation have some risks. You should discuss these with your doctor before you decide whether to go ahead with surgery.

What will happen to me?

Everyone is different, so it's hard to say what will happen to you. Your symptoms might improve, stay the same, or gradually get worse.

If you have PAD, you have an increased chance of having a heart attack or stroke. Some people whose legs become badly damaged need to have a leg amputated. But this is rare. Having treatment can reduce the chance of this happening.

You will probably need to see your doctor at least once a year for a check-up, to make sure your PAD is not getting worse.

The patient information from *BMJ Best Practice* from which this leaflet is derived is regularly updated. The most recent version of Best Practice can be found at bestpractice.bmj.com. This information is intended for use by health professionals. It is not a substitute for medical advice. It is strongly recommended that you independently verify any interpretation of this material and, if you have a medical problem, see your doctor.

Please see BMJ's full terms of use at: bmj.com/company/legal-information. BMJ does not make any representations, conditions, warranties or guarantees, whether express or implied, that this material is accurate, complete, up-to-date or fit for any particular purposes.

© BMJ Publishing Group Ltd 2021. All rights reserved.

