



Advice for Patients with Symptoms of Arterial Occlusive Disease

How to Prevent Complications



Dear reader,

This brochure is to inform you of issues surrounding peripheral arterial occlusive disease (PAOD for short) which is also known as intermittent claudication or informally, as 'smoker's leg'. It is a disease in which atherosclerosis has built up in the legs. This restricts the blood flow in the affected vascular region, which can cause considerable discomfort when walking.

As a separate consequence, there is also an increased risk for patients affected of suffering a stroke or a heart attack or even an acute vascular occlusion in the leg, which can result in the need to amputate. The risk of such events occurring can be reduced by taking medication.

The following pages contain information relating to peripheral arterial occlusive disease. It explains how to reduce the risk of complications of the disease and why medications should be taken regularly and at the dosage prescribed by the doctor.

Happy reading!

The brochure is intended to provide information about PAOD but is no substitute for visiting your doctor.



Good to Know: Peripheral Arterial Occlusive Disease

Peripheral arterial occlusive disease (PAOD) is a chronic disease of the blood vessels affecting the extremities, usually the legs.

PAOD is generally caused by atherosclerosis, i.e. arteriosclerosis, or vascular calcification in the vernacular. This results in deposits in the vessel, which in turn constricts the affected blood vessel and restricts the flow of blood. The resulting circulatory disorder can lead to increasing complaints as the vascular changes progress.



People with PAOD not only have constricted arteries of the leg, but also have constriction in the arteries supplying the heart and brain. This explains why patients not only have problems walking, but also have an increased risk of heart attack or stroke.



PAOD is divided into four stages:

Stage I:

Narrowing in the leg arteries. This does not result in any symptoms for some time.

Stage II:

This stage of the disease is also known as intermittent claudication - sometimes known as smoker's leg in the vernacular. Pain occurs when walking and forces the person affected to keep taking breaks.

Stage III:

Pain in the legs even at rest, especially at night.

Stage IV:

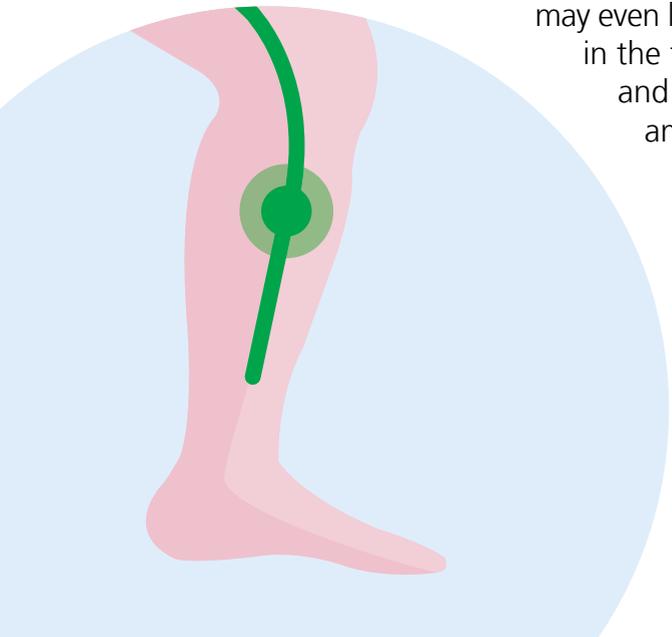
Open wounds form that heal badly.

Symptoms of PAOD

PAOD usually develops unnoticed at first, as there are no characteristic symptoms at the start. With increasing narrowing of the blood vessel, however, the resulting circulatory disturbance can be noticed through symptoms. This is because the restricted blood flow means that the surrounding tissue is no longer sufficiently supplied with oxygen and nutrients. This leads to pain when walking and the affected person must stop after a relatively short distance while walking and wait until the pain subsides once more. This is why, in German, the disease is known as 'Schaufensterkrankheit' or 'shop window disease'.

With increasing narrowing of the vessels, symptoms become noticeable at an increasingly early stage. There is increasing pain in the area of the calf, but also radiating to the foot, thigh and even in the buttocks. This happens initially only during physical exertion and especially when walking, also at rest later on.

In extreme cases, the circulatory disorders may even lead to tissue death - usually in the toes or around the ankle and heel - and necessitate an amputation.

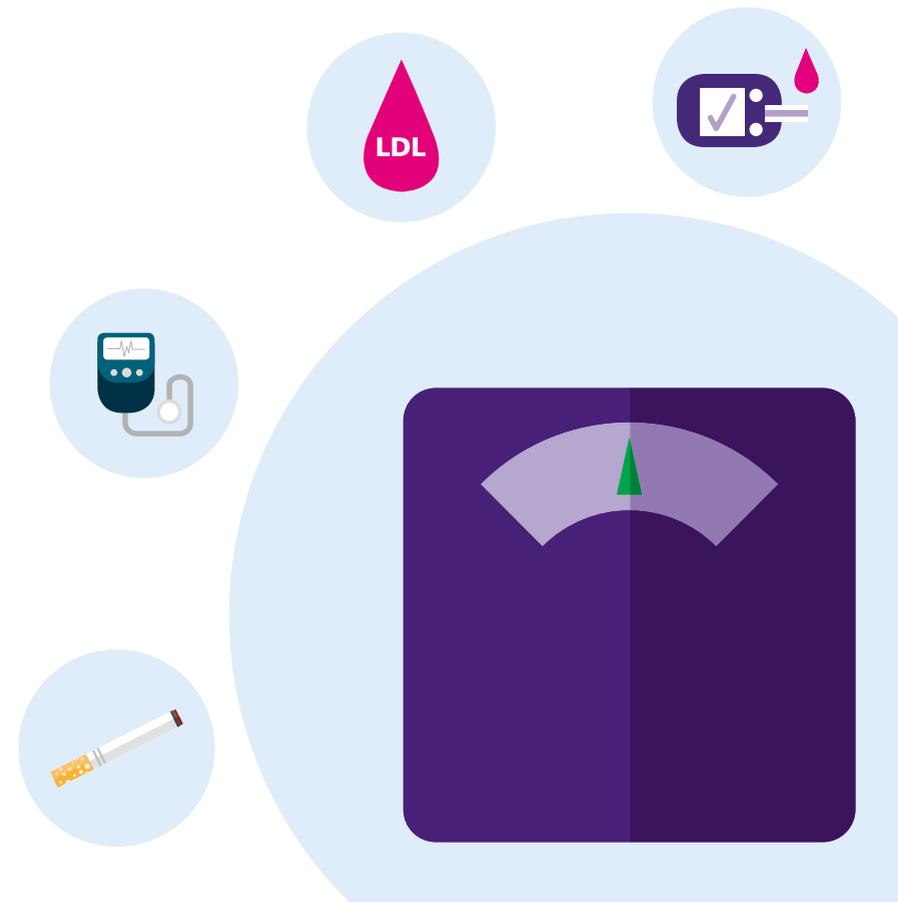


Risk Factors for PAOD

Risk factors exacerbate PAOD either directly or indirectly through the development of diseases which in turn increase the risk that atherosclerosis and PAOD will develop.

This includes:

- ◆ smoking
- ◆ hypertension
- ◆ excessive blood fat values (cholesterol values)
- ◆ obesity
- ◆ diabetes mellitus



Treating Symptomatic PAOD

Several methods are employed in the treatment of PAOD: specialized gait training, procedures aimed at reopening the narrowed vessel and drug therapy to prevent complications.



Exercise is particularly important in the early stages of the disease, and this is best done in the form of gait training, which should be completed daily for 30-40 minutes.

This type of gait training can stimulate the formation of new blood vessels, which can bypass the narrowed vessel and supply the surrounding muscles with oxygen and nutrients once more. The improved care often leads to a reduction in pain when walking and also increases the distance patients can walk without pain.

If the disease has already progressed, attempts are usually made to improve blood circulation, for example by stretching the affected vessel with a balloon. A metal support (stent) can be implanted in the vessel at the same time to keep the constriction open and thus ensure blood flow. If this is not possible, the blood flow can be restored by surgical procedures such as calcium deposit removal, a procedure known as extension plastic surgery, or a bypass operation. The procedure used in the individual case depends on the extent of the disease and the localization of the vascular constrictions.

In addition, a healthy lifestyle should reduce the risk factors of PAOD. One particularly important factor is quitting smoking. Furthermore, it is important to stick to a balanced and healthy diet, normal weight should be reached and maintained and regular physical activity should be ensured.



Preventing Strokes and Heart Attacks

In addition to alleviating acute symptoms, one of the main goals when treating PAOD is to protect the patient from subsequent complications of the disease, which do not only affect the extremities. This is because arteriosclerosis is usually not limited to the leg arteries but also develops in other parts of the body.

This risk can be reduced by treatment with drugs that inhibit blood clotting and counteract the clotting of blood platelets (thrombocytes).



About Blood Clotting



Acute vascular occlusions result from the formation of blood clots, i.e. thrombi, which close the blood vessel like a plug and bring the local blood flow to a standstill. Thrombi form when the blood “clots”. This leads to clotting of blood platelets (thrombocytes).

Blood clotting is a natural and important protective mechanism of the body that is intended to protect it from blood loss in the event of injury.

However, blood clotting is a double-edged sword: As beneficial as it is to stop bleeding in the event of injuries, it is dangerous if the process within the blood vessel system leads to the formation of a blood clot. This is because the thrombi that form can interrupt the vital blood flow. The consequences depend on where this occurs. If a thrombus forms near the coronary arteries, doctors call this a heart attack. If a blood clot is transported into the brain with the blood and results in a vascular occlusion, this is known as a stroke. If thrombi form in the atrium, which is exacerbated by atrial fibrillation, there is also a risk of stroke. The formation of blood clots in the area of the legs can lead to thrombosis with the risk of developing pulmonary embolism.

Blood clotting is controlled by the complex interaction of various clotting factors. However, this interaction can be influenced. This is possible by inhibiting blood clotting, i.e. by taking what is known as anti-clotting medication. Within this active substance group, doctors also talk about anticoagulants, i.e. active substances that prevent the blood from clotting (coagulating). They reduce the tendency to form blood clots.

In addition, the agglutination of blood platelets (thrombocytes) can be counteracted with the help of a thrombocyte aggregation inhibitor such as acetylsalicylic acid, known as ASA for short. The active substance prevents blood clotting resulting from a mechanism other than anti-coagulants. It inhibits aggregation, i.e. the clumping together of thrombocytes, and thereby reduces the risk of thrombus formation.

By taking a combined anticoagulant and an antiplatelet, two different methods practically prevent thrombus formation and therefore complications of PAOD.



No Fear of Bleeding

Those taking anticoagulants should be aware that anti-clotting medication - and to a lesser extent also thrombocyte inhibitors - inevitably increase the tendency to bleed. This is an inherent part of it, because anti-clotting medication is prescribed by doctors to inhibit blood clotting and thus the formation of thrombi in the vascular system.

Some patients worry about this increased tendency towards bleeding and even worry about bleeding to death in case of injury. But anti-coagulants do not prevent blood clotting entirely, only slow it down. In concrete terms, this does not mean that there is a risk of bleeding to death at the slightest injury. But it is important to be aware that the risk of bleeding is increased. As a rule, this concerns minor bleeds, resulting in a hematoma (bruise) if those affected knock against something. Those affected also develop bleeding gums more easily or, for example, nosebleeds. In addition, bleeding from injuries may be a little more profuse than usual.

If bleeding does occur, it is treated in accordance with the standard procedure. In the event of a minor bleed, for example, if you have slightly injured yourself while working in the kitchen or garden, you may have to press the wound a little harder or longer. Serious injuries should be treated by the doctor, and there are, as normal, appropriate treatment options to stem more severe bleeding.



However, in an emergency situation, the doctor should be informed that anti-clotting medication is being taken. **For your own safety, you should always carry a patient ID card with you, specifying that you are taking the anti-clotting medication.** It is best to keep it in your wallet or purse, or together with other forms of identification. In the unlikely event of an accident, for example, the doctor can immediately take appropriate action. This type of patient ID card is included in the medication package prescribed to you by your doctor. It is attached to the package insert and can be easily separated using the perforated area.



Reducing the Risk of Bleeding

You can also take simple measures yourself to prevent bleeding from injuries, for example. Those taking anti-clotting medication should be particularly strict when it comes to any precautions:

- ◆ Take care when handling sharp knives and scissors,
- ◆ get rid of tripping hazards in the home, and
- ◆ wear a helmet when cycling.

In addition, do not take any medication without consulting the doctor treating the patient, as this may have an added influence on blood clotting. This also applies, of course, to over-the-counter painkillers and anti-rheumatic drugs such as ibuprofen. In addition, ASA should not be taken in high doses (e.g. due to headaches) without consulting your doctor.

Furthermore, factors that exacerbate bleeding should be avoided where possible. This means, for example, that high blood pressure is reduced adequately and that the consumption of alcohol is restricted, as high alcohol consumption per se can increase the tendency to bleed.



Adherence to Therapy is Required

People with PAOD often require various medications, such as one or more antihypertensive and/or anticholesterol medications, and possibly drugs to treat additional risk factors or diseases.

It may be difficult to keep taking the preparations reliably and in accordance with the doctor's prescription. It is very important to take the tablets on a regular basis, however, so that the prescribed active ingredients can develop their full effect. It is therefore advisable to take the tablets at a certain time of the day, for example regularly at breakfast and at dinner. This makes forgetting to take the tablets more difficult. In addition, there are many other supportive measures that can help you to remember to take tablets, i.e. to be "adherent to therapy":

- ◆ If there is a **point in time** at which other medicines have to be taken, it makes sense to take them at the same time as the other medicines.
- ◆ Taking the tablets can also be linked with **everyday activities**, such as reading the newspaper and/or the evening news on the television.



Any Questions?

- ◆ In addition, **linking up with everyday objects** can aid your memory. It is a good idea to put a reminder sticker on objects that you use every day, such as the bathroom mirror, the cupboard door or the coffee machine. The stickers in question will be provided by Bayer Vital free of charge.
- ◆ The **SMS reminder service** is also available. Bayer Vital offers patients who are prescribed anti-clotting medication by Bayer daily SMS reminders to take the tablets at no charge. The SMS reminder service can be adjusted in terms of time to suit individual needs. It can be activated online at www.gegen-thrombose.de.
- ◆ Of course, patients must **continue taking the tablets** while on holiday. If you are flying across multiple time zones, you should ask your doctor how best to take the active ingredients in such cases.

If you miss a tablet at the usual time, you can take it at a later stage that day. However, you should never take more than the prescribed dose daily. The next tablet should instead be taken the next day at the usual time.



In addition, drug treatment should never be terminated without prior consultation with the doctor, as otherwise there is no effective protective impact in terms of thrombosis and pulmonary embolism.

This brochure provides only a brief overview of issues regarding symptomatic peripheral arterial occlusive disease and its treatment options. It cannot, and is not in any way intended to, replace the conversation with your doctor. This is important because the doctor can assess your individual situation and choose the treatment that is best for you.

If you have any further questions, please ask your doctor. There is also the option of calling our hotline free of charge or visiting our website:



0800-927 35 86 (8 a.m. to 6 p.m. on weekdays)



www.gegen-thrombose.de



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