Half of the bypasses performed will need some “maintenance” procedure to keep them going. This may be an x-ray procedure or might involve further surgery.

What is the risk of losing my leg?

Very few patients with intermittent claudication will ever be at risk of losing a leg through gangrene. It is the vascular surgeon’s job to prevent this outcome at all costs.

If there is thought to be any risk to the limb a vascular surgeon will always act to save the leg if at all possible.

You can minimise the risk of progression of your symptoms by following the advice below.

It is the simple measures which are the most effective. The vast majority of patients do not need x-ray or surgical procedures to treat their symptoms.

How can I help myself?

There are several things you can do which can help. The most important is to stop smoking and take regular exercise.

If you are a smoker you should make a determined effort to give up completely. Tobacco is particularly harmful to claudicants for two reasons.

- **Smoking speeds up the hardening of the arteries, which is the cause of the trouble**
- **Cigarette smoke prevents development of the collateral vessels which get blood past the blockage.**

The best way to give up is to choose a day when you are going to stop completely rather than trying to cut down gradually. If you do have trouble giving up please ask your doctor who can give you advice on additional help, or put you in touch with a support group.

It is also important not to be overweight. The more weight the legs have to carry around, the more blood the muscles will need. If necessary, your doctor or dietician will give you advice about a weight reducing diet.

For more information please see our ‘Are your legs killing you’ booklet.

CIRCULATION FOUNDATION
The Vascular Charity

Circulation Foundation
Blackburn House, Redhouse Road,
Seafield, West Lothian EH47 7AQ
T: 020 7205 7151
E: info@circulationfoundation.org.uk

circulationfoundation.org.uk

The Circulation Foundation is an operating division of the Vascular Society, a charitable company limited by guarantee, company number 5060866 and registered charity number 1102769

PATIENT INFORMATION

CIRCULATION FOUNDATION
The Vascular Charity

INTERMITTANT CLAUDICATION

Vascular disease is as common as both cancer and heart disease and accounts for **40% of deaths in the UK**, many of which are preventable.

SAVING LIVES AND LIMBS
circulationfoundation.org.uk

Intermittent Claudication is caused by narrowing or blockage in the main artery taking blood to your leg (femoral artery). This is due to hardening of the arteries (atherosclerosis). The blockage means that blood flow in the leg is reduced.

Blood circulation is usually sufficient when resting, but when you start walking the calf muscles cannot obtain enough blood. This causes cramp and pain which gets better after resting for a few minutes. If greater demands are made on the muscles, such as walking uphill, the pain comes on more quickly.

Claudication usually occurs in people aged over 50 years; however it can occur much earlier in people who smoke and those who have diabetes, high blood pressure or high levels of cholesterol in the blood.

Unfortunately, the blockage which causes the claudication will not clear itself, but the situation can improve. Smaller arteries in the leg may enlarge to carry blood around the block in the main artery, this is called collateral circulation.

Many people notice some improvement in their pain as the collateral circulation develops. This normally happens within six to eight weeks of the start of the claudication symptoms.

How is Claudication detected?

A blockage in the circulation can be detected by examining the pulses and blood pressure in the legs. A blockage will lead to loss of one or more pulses in the leg.

The blood pressure in your feet is measures using a handheld ultrasound device called a continuous wave Doppler. The blood pressure in the foot can be measured and compared with arm blood pressure (which is usually normal).

This measurement is called the ABPI (ankle brachial pressure index) and is expressed as a ratio. The ABPI provides an objective measure of the lower limb circulation.

Sometimes an arteriogram may be performed. An arteriogram is an x-ray of the arteries performed by injecting contrast (dye) into the artery at groin level. The contrast outlines the flow of blood in the arteries as well as any narrowings or blockages.

Treatments

Claudication is not usually limb threatening and it is not necessary to treat it if the symptoms are mild.

Claudication often remains stable with no deterioration in walking distance over long periods.

Less than one in ten patients will notice any reduction in walking distance during their lifetime. However if your symptoms worsen, there are treatments available which you can discuss with your vascular surgeon.

General measures to improve walking distance include stopping smoking, taking more exercise and making sure you are not overweight.

Blood tests to rule out other causes of atherosclerosis are often done. These will include a blood sugar test to exclude diabetes, thyroid and kidney function tests and a cholesterol test.

There are a number of drugs on the market which claim to improve walking distance. These are not used by vascular surgeons as the evidence for their effectiveness is very limited. There is evidence that taking Aspirin or an antiplatelet medication is generally good for people with circulation disorders. Please consult either your G.P or vascular surgeon for more information.

There are three approaches to treating the claudication itself:

Exercise
Exercise has been shown to more than double walking distance. Some hospitals can offer an exercise programme with structured exercises. If this is not available, a brisk (the best you can do) walk three times a week lasting 30 minutes will normally noticeably improve walking distance over 3-6 months.

Angioplasty
Angioplasty(stretching the artery where it is narrowed with a balloon) may help to improve walking distance for some people. Overall it is less effective in the longer term than simple exercise. Angioplasty is usually limited to narrowings or short complete blockages (usually less than 10cm) in the artery.

Surgery
Bypass surgery is usually reserved for longer blockages of the artery, when the symptoms are significantly worse. There may be very short distance claudication, pain at rest, ulceration of the skin in the foot, or even gangrene in the foot or toes.

Is Treatment Successful?
The simple exercise program is very successful at increasing the walking distance. It provides a long term solution for the majority of people, and most importantly it is safe.

Because surgery (and to a lesser extent angioplasty) is not always successful, it can normally only be justified when limb is threatened. There will usually be pain keeping you awake at night, or ulceration or gangrene of the foot or toes.