

# **Intermittent claudication**

## **Vascular Surgery** Patient Information Leaflet

Under review

## What is intermittent claudication?

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) and 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 and 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 measured 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. An ultrasound scan may be requested to look at the flow of blood in the arteries. This will show if there are any narrowings.

Sometimes an MRA may be performed. This is performed by injecting contrast dye into your hand and then taking a series of images. The contrast dye outlines the flow of blood in the arteries as well as any narrowings or blockages.

## Management of intermittent claudication

Claudication is not usually limb threatening, often remaining stable with no deterioration in walking distance over long periods. Less than one in 10 patients will notice any reduction in walking distance during their lifetime.

Claudication is usually treated conservatively rather than choosing an interventional option such as surgery. The aim of the treatment is to reduce the risk factors that contribute towards the development and progression of atherosclerosis.

**Smoking** – is a significant contributing factor for the development of atherosclerosis. You will be advised to stop smoking as soon as possible but we realise how difficult this can be. Help to stop smoking can be obtained from your GP or we can refer you to Dudley Stop Smoking service.

**Exercise** – exercise has been shown to more than double the distance that can be walked without pain. A brisk (the best you can do) walk three times a week lasting 30 minutes will normally noticeably improve walking distance over three to six months.

**High blood cholesterol** – your blood will be tested to monitor the cholesterol level as high levels can contribute towards the progression of atherosclerosis. You are advised to take a level of fatty and processed food which will help reduce the level. Your doctor may start you on a 'Statin' which is a tablet to help reduce cholesterol levels.

**Diabetes** – if you are a diabetic it is important that this is carefully monitored and glucose levels kept within a normal range.

**High blood pressure** – it is important that blood pressure is monitored by your GP practice to ensure it is within a healthy range. It may mean that medication is required to bring it into that range. Your GP will advise you on any medication if required.

## What treatment is available?

If symptoms of claudication deteriorate and lifestyle is affected intervention may be considered.

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

Half of the bypass operations 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:

- Stop smoking
- Exercise
- Healthy diet
- Reduce weight

## Further help and information

The Circulation Foundation

Web: [www.circulationfoundation.org.uk](http://www.circulationfoundation.org.uk)

[www.patient.co.uk](http://www.patient.co.uk)

### Access to benefits

If you require information about benefits information can be found on:

[www.direct.gov.uk](http://www.direct.gov.uk)

[www.dwp.gov.uk](http://www.dwp.gov.uk)

or your local benefits office.

## Your comments

Patient Advice and Liaison Service (PALS) Freephone 0800 073 0510.

PALS is here to support patients, relatives or carers when they have concerns or queries. They will do their best to resolve any concerns you may have and can also give advice on making a formal complaint.

If you require any further information regarding our services or if you have any questions about the management of your condition, please contact your consultant or vascular nurse on the telephone numbers below.

### **Russells Hall Hospital, Dudley**

Mr Jayatunga	Consultant vascular surgeon	Tel: 01384 244243
Mrs Shiralkar	Consultant vascular surgeon	Tel: 01384 244246
Mr Pathak	Consultant vascular surgeon	Tel: 01384 244245
Mr Rehman	Consultant vascular surgeon	Tel: 01384 244176
Mr Newman	Consultant vascular surgeon	Tel: 01384 244243
Mr Wall	Consultant vascular surgeon	Tel: 01384 456111 Ext 1235
Joy Lewis/Sharron Cole	Vascular nurse specialist	Tel: 01384 456111 Ext 2456 (answer machine)

### **New Cross Hospital, Wolverhampton**

Mr Garnham	Consultant vascular surgeon	Tel: 01902 695977
Mr Hobbs	Consultant vascular surgeon	Tel: 01902 695971
Paula Poulton/Val Isgar	Vascular nurse specialist	Tel: 01902 695984

### **Manor Hospital, Walsall**

Mr Abrew	Consultant vascular surgeon	Tel: 01922 721172 Ext 7763
Mr Khan	Consultant vascular surgeon	Tel: 01922 721172 Ext 6669
Fiona Fox	Vascular nurse specialist	Tel: 01902 721172 Ext 7648

This leaflet can be made available in large print, audio version and in other languages, please call 0800 0730510

ਜੇਕਰ ਇਹ ਲੀਫਲੈੱਟ (ਛੋਟਾ ਇਸਤਿਹਾਰ) ਤੁਸੀਂ ਆਪਣੀ ਭਾਸ਼ਾ (ਪੰਜਾਬੀ) ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕ੍ਰਿਪਾ ਕਰ ਕੇ ਪੇਸ਼ਟ ਇੰਨਫਰਮੇਸ਼ਨ ਕੋ-ਆਰਡੀਨੇਟਰ ਨਾਲ **0800 0730510** ਟੈਲੀਫੋਨ ਨੰਬਰ ਤੇ ਸੰਪਰਕ ਕਰੋ।

यदि आपको यह दस्तावेज़ अपनी भाषा में चाहिए तो पेशन्ट इनफरमेशन को-आरडीनेटर को टैलीफ़ोन नम्बर **0800 0730510** पर फ़ोन करें।

જો તમને આ પત્રિકા તમારી પોતાની ભાષા (ગુજરાતી)માં જોઈતી હોય, તો કૃપા કરીને પેશન્ટ ઈન્ફોર્મેશન કો-ઓર્ડિનેટરનો **0800 0730510** પર સંપર્ક કરો.

आपनि यदि এই প্রচারপত্রটি আপনার নিজের ভাষায় পেতে চান, তাহলে দয়া করে পেশেন্ট ইনফরমেশন কো-অর্ডিনেটরের সাথে **0800 0730510** এই নম্বরে যোগাযোগ করুন।

إذا كنت ترغب هذه الوريقة مترجمة بلغتك الاصلية ( اللغة العربية ) , فرجاءا اتصل بمنسق المعلومات للمريض  
**0800 0730510** على التلفون Information Co-ordinator

مہم ضرورت اریلف ایٹ کوٹھا زبان (اردو) میں حاصل کرنے کے لئے روبرو ہائی ٹیلیفون نمبر **0800 0730510** پوزیشن کو-آورڈینٹر (مریضوں کے لئے معلومات کی فراہمی کے سلسلے میں) کے ساتھ رابطہ کریں۔

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