Introduction
Leg pain that comes on when walking can be due to a number of causes. Often called intermittent claudication, this leg pain is usually felt in the calves, thighs or buttocks.
This leaflet describes intermittent claudication and why it happens, along with possible causes and underlying problems. It also explains diagnosis and treatment options, and provides guidance and advice on what you can do to help reduce symptoms.
Effective diagnosis and non-invasive tests, plus tailored treatment that includes management of risk factors and lifestyle, can all help towards reducing symptoms and preventing disease progression or complications.

What is intermittent claudication?
Intermittent claudication is a condition in which pain in the legs and/or buttocks comes on after you start walking and then goes away with rest. The claudication pain is usually referred to as intermittent because it comes and goes with exertion and rest. The pain may be cramping or aching, and may occur in the calf or thigh of one or both legs or, more rarely, in the buttocks.

Why does it happen?
The symptoms of intermittent claudication arise from a number of different causes. One of the most common is peripheral artery disease (PAD) but symptoms can also be caused by problems with the nerves or spine.
When the cause is due to the development of PAD in the lower limbs, the arteries narrow down and sometimes become blocked by a build up of fatty deposits (called atheroma) – a process known as atherosclerosis.
As a result, when the muscles in the legs require extra blood and oxygen during exercise, for example when you start walking, the arteries are unable to supply this extra demand and the symptoms of aching pain develop. Conversely, by stopping walking, and resting, the muscles require less blood and oxygen and the pain will subside.

Diagnosis: detecting claudication
Diagnosis relies on a careful note being made of the patient’s symptoms and can be aided by certain non-invasive tests such as ankle brachial pressure indices, exercise testing and ultrasound of the peripheral arteries.
Ankle brachial pressure index
This test compares the blood pressure (BP) in your ankles with the BP in your arms to see whether there are any blood flow problems in your legs.
Ultrasound scan of peripheral arteries
This scan looks inside your leg to give a picture of the anatomy of your arteries; it may detect any narrowing or blockage.
Exercise testing
Sometimes it can be helpful to measure the blood pressure in your legs before and after walking or exercising to see if there is any decrease after exercise.
Other tests such as CT angiogram or MR angiogram may be useful if intervention is being contemplated.
Medical treatment

Treatment aims
The main aims are to relieve the symptoms and to reduce the risk of further cardiovascular disease.

Risk factors and lifestyle management
The mainstay of treatment relies on the management of risk factors such as smoking and lack of exercise. Treatment options therefore focus on:
- Stopping smoking.
- Controlling blood pressure; regular checks are important.
- Controlling cholesterol levels.
- Controlling blood sugars (if diabetes is present).
- Weight loss if appropriate.
- Regular and recommended exercise.

Exercise
The treatment most suited to you may include a recommended exercise programme. Appropriate and regular exercise can be very beneficial by helping to increase the blood flow to your leg muscles when you walk and to increase the distance you are able to walk before pain starts.

It can also help in preventing any underlying vascular disease from becoming worse and in improving your quality of life, e.g. boosting general fitness and helping to control high blood pressure.

Some simple, beneficial exercise can be done at home, and this is described in associated leaflet: Step up! Exercise for intermittent claudication (see For more information, page 6).

Surgical treatment
Where symptoms are disabling and are not relieved by exercise, or assessment reveals significant underlying disease, surgical treatment including angioplasty or bypass may be beneficial.

Your assessment and treatment
At Premier Vascular we are able to offer a one-stop consultation that includes a duplex ultrasound scan and other appropriate tests, and a full range of treatments. We are pleased to offer a choice of appointment times and convenient locations.

- Initial consultation and assessment: a one-stop duplex ultrasound scan with a qualified sonographer under the supervision of a vascular surgeon.
- Treatment tailored to the diagnosis. The treatment that’s best for you will depend on the findings of your assessment, and may include an appropriate exercise programme, lifestyle recommendations and, if symptoms are particularly disabling, minimally invasive interventions such as angioplasty.
- Claudication review and follow-up clinic appointments as required.

Helping yourself: what you can do
As described on page 4, managing important risk factors is highly beneficial. You can help yourself with some practical and lifestyle changes to improve symptoms, maintain improvements in your quality of life and help prevent future complications.

- Stopping smoking. Smoking speeds up hardening of the arteries: ask for advice and support group information.
- Weight. Maintaining a healthy weight helps to keep risk factors under control, e.g. reduces your blood pressure and cholesterol level.
- Regular exercise programme. Further guidance can be found in: Step up! Exercise for intermittent claudication (see For more information, page 6).

For more information
The following Premier Vascular leaflet provides information and advice on associated treatments available.

- Step up! Exercise for intermittent claudication

For additional information and guidance see NICE: National Institute for Health and Care Excellence
www.nice.org.uk/guidance
www.nice.org.uk/guidance/cg147/ifp/chapter/Lower-limb-peripheral-arterial-disease

Contact us
Premier Vascular:
Mr Martin Claridge and Mr Donald Adam, Consultant Vascular and Endovascular Surgeons.
To arrange an appointment please contact Secretary Sue Wilcox:
e reception@premiervascular.co.uk
t 0121 769 2646
f 0121 242 3299

Edgbaston BMI Priory & Edgbaston Hospitals
Sutton Coldfield Spire Little Aston Hospital
Solihull Spire Parkway Hospital
Leamington Spa Nuffield Health Warwickshire Hospital
London The London Clinic, Harley Street

Keyhole vascular treatments in the heart of the UK
www.premiervascular.co.uk