

Intermittent claudication exercise programme

This leaflet explains about an exercise programme that is offered to patients with intermittent claudication. If you have any questions or concerns, please ask a member of staff caring for you.

What is intermittent claudication?

Intermittent claudication is a cramp-like pain felt in the calf, thigh or buttock during walking or other exercise. It happens because fatty deposits in the arteries have built up and restricted blood flow to the leg muscles. This pain usually wears off after a few minutes' rest, because the muscles need much less blood when they are not being used. The following things increase your risk of intermittent claudication:

- smoking
- high blood pressure
- high cholesterol
- diabetes
- obesity
- lack of exercise
- having a family history of intermittent claudication or heart disease.

To find out if you have intermittent claudication, the nurse will examine the blood pressure in the foot and compare it with the blood pressure in your arm. This is known as the Ankle Brachial Pressure Index (ABPI). You will also have an ultrasound or CT scan of your arteries.

If you have intermittent claudication you will be enrolled on to an exercise programme. We will also ask you to complete a lifestyle questionnaire about your condition every time you come to the clinic for your follow up to help monitor your progress.

How does the exercise programme help intermittent claudication?

Regular exercise increases the amount of blood that the arteries can carry to the muscles. The body, over time, can build up new smaller blood vessels (called collaterals) to bypass the fatty deposits in the larger blocked or narrowed blood vessels. Exercising through the pain helps build up these smaller vessels. Over time, exercising will reduce the amount of pain you have when walking and you will be able to walk further before the pain starts.

Having intermittent claudication means that you probably also have a degree of arterial disease in the arteries supplying blood to your heart and brain. This means that you are at a higher risk of having a heart attack or stroke than other people of your age. The aim of the treatment for intermittent claudication is not only to improve your leg symptoms but also to reduce your risk of having a heart attack or stroke.

How does the exercise programme work?

The programme is based on evidence and led by specialist nurses with the support of doctors that specialise in blood vessels. It is intended for patients whose symptoms do not require surgery and are suitable for exercise therapy.

The programme consists of eight weeks of structured exercise classes, with each weekly class lasting approximately one hour. If you live outside Lambeth and Southwark you will be given instructions to exercise on your own or we will ask your GP to refer you to an exercise class in your local area if one is available. After 12 weeks we will review your progress at an outpatient appointment.

What is the risk of losing my leg?

Very few patients with intermittent claudication will ever be at risk of losing a leg (1-2% and up to 5% for people with diabetes). 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 an x-ray or surgical procedures to treat their symptoms.

How you can help yourself

Stop smoking: Stopping smoking is the single most effective way you can improve your health. Smoking speeds up the hardening of the arteries, doubling the risk of fatty substances being deposited and thickening the blood. This makes it difficult for the blood to pass through and prevents development of the new collateral vessels which get blood past the blockage. The risk increases with the amount of cigarettes you smoke. If you are still smoking you are strongly advised to give up. If you would like help with this, we can refer you to a smoking cessation advisor, who can offer the appropriate support that you may need to give up.

Weight: If you are overweight you are strongly advised to lose weight with exercise and diet:

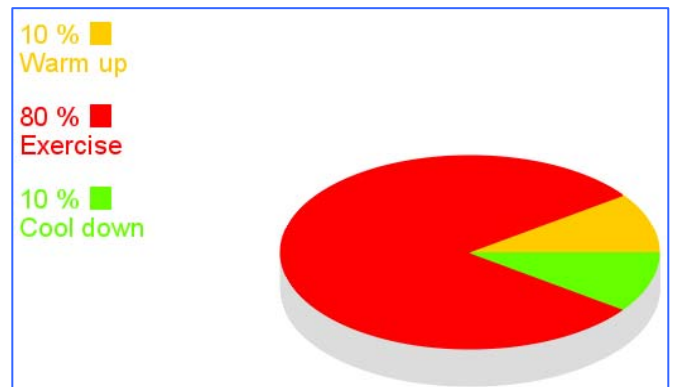
- reduce your fat intake, particularly animal fats
- eat fish at least twice a week, one of which should be oily
- eat at least five portions of fruit and vegetables a day
- consider eating more starchy and high fibre foods, such as wholegrain varieties, pulses and oats
- eat less salt
- drink less alcohol
- read labels carefully.

Medication: It is important that you continue to take your prescribed medications as directed by your doctor. In particular you should be taking a blood thinning (antiplatelet) medicine, usually aspirin, and a statin to lower your cholesterol. This will help reduce the risk of further build-up in the arteries and reduce the risk of you suffering a heart attack or stroke. If you have high blood pressure it is important to keep taking your medication to keep it within set levels and prevent further damage to the blood vessels. Your blood pressure should be checked at regular intervals to ensure that the target set for you is maintained.

Diabetes: If you are not known to have diabetes, your blood sugar levels when fasting should be checked to ensure that there is no undiagnosed problem which needs treatment. If you have diabetes it is important to try hard to keep your blood sugar as near as possible to a normal level. This is because high levels of blood sugar can speed up atherosclerosis (when the arteries become clogged with fatty substances called plaques). People with diabetes also often have a different and harder to treat disease pattern. Therefore it is important to keep good control of your blood sugar levels. It is also important to take especially good care of your feet by regular moisturising, nail care and avoiding injuries to prevent diabetic foot disease.

Exercise: Any form of exercise is beneficial for your health, for example swimming, cycling and dancing. Brisk walking is the best form of exercise to help your circulation and leg pain as you use the large muscles of your legs.

It is important to start any exercise with a warm-up. This means starting the activity at a slow pace to let the muscles get warm and ready for exercise and to allow a gradual increase in your heart rate.



It is also important to bring the pace of exercise down gradually before you stop. This is called a 'cool-down' and allows your heart rate and blood pressure to come down gradually. The pie chart above shows the proportion of time you should spend on your warm-up, exercise and cool-down in each session.

To get maximum benefit, follow these instructions:

- Exercise through the pain in your muscles until you can no longer be distracted from it (level 3 of the claudication pain scale – see below).
- Rest until the pain has subsided then start exercising again.
- Repeat this cycle for 30 to 60 minutes, 3-5 times per week consistently for at least 12 weeks.

Please note that you may not see major changes for the first nine weeks.

The pain will not cause your leg any harm. There is evidence to prove exercise is of great benefit and though it may seem impossible at present, the majority of people with intermittent claudication find that by continuing to exercise they can improve their symptoms significantly over time.

You should increase your total walking time and distance gradually, starting at the level that you are now (with rests to allow pain to ease as necessary).

Claudication Pain Scale

Level 1	Mild discomfort or pain
Level 2	Moderate discomfort or pain from which you can be distracted
Level 3	Intense pain from which you cannot be distracted
Level 4	Unbearable pain – stop, rest and resume when you are able

Benefits of the exercise class:

- Reduces pain
- Improves blood flow
- Improves cardiovascular fitness
- Reduces the risks of needing surgical intervention
- Offers professional advice available from a wide range of health professionals
- Provides an opportunity to meet other people with the same condition

A few tips

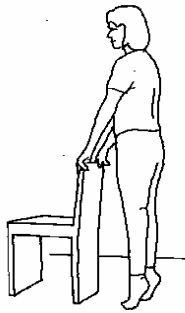
- Wear comfortable clothing
- Do not exercise up to one hour after a meal (it is better to exercise before meals)
- Do not exercise if you feel unwell or have a temperature
- Do not exercise in excessively hot or cold conditions.
- Drink some water before and after your exercise session
- Try to pick out a route with plenty of resting places. These could be bus stops, walls or park benches

Stop exercising if you experience any of these:

- chest pain
- excessive shortness of breath,
- heart palpitations
- dizziness or light-headedness
- nausea (feeling sick)
- excessive sweating
- extreme fatigue, or
- blurred vision.

If you get any of those symptoms you must speak to your doctor/nurse before doing any further exercise.

Recommended exercises



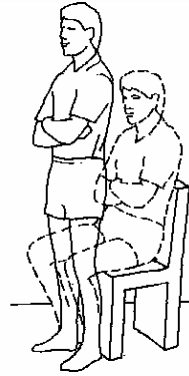
1. Stand, push up on your toes. Repeat _____ times



2. Stand on both feet on a step with both of your heels over the edge. Let your heels drop downwards. Push up on your toes. Repeat _____ times.



3. Stand in front of a step. Step up _____ times with one leg leading.



4. Sitting with your arms crossed. Stand up and then sit down slowly on a chair. Repeat _____ times.



5. Stand. Walk on your toes for _____ seconds.

All exercise images © PhysioTools Ltd

Please use the exercise record to document your progress and bring it to all your follow-up appointments.

Exercise record

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.
Goal:
(Walking distance or time)

Week 1

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 2

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 3

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 4

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 5

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 6

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 7

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 8

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 9

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 10

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 11

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Week 12

I currently walkmetres before pain starts and up tometres when the pain becomes unbearable and I have to stop forminutes for the pain to resolve.

Goal:

(Walking distance or time)

Date and start time	End time	Total exercise time	Number of stops to rest	Overall distance covered	Comments, thoughts or problems and type of exercise

Contact us

If you have any questions or concerns before or after you have left hospital, please telephone the **vascular specialist nurses** on **020 7188 0056** (Monday to Friday 8am–5pm).

The specialist nurses can put you in touch with the vascular doctors if you wish.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

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