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EXPERT COMMENT: Walking can relieve leg pain in people with peripheral artery disease

Exercise has been used in the treatment of many medical conditions, [including heart and lung diseases](#). But it can also play an important role in treating peripheral artery disease. Our [latest review](#) shows that for people with peripheral artery disease, exercise programmes may help improve walking ability and quality of life by relieving symptoms of leg pain, cramps, and fatigue that some people experience.

Peripheral artery disease is a common type of cardiovascular disease, which

affects [236 million](#) people across the world. It happens when the arteries in the legs and feet become clogged with fatty plaques through a process known as [atherosclerosis](#).

While some people with this disease experience no symptoms, the most [classic symptoms](#) are pain, cramps, numbness, weakness or tingling that occurs in the legs during walking – known as [intermittent claudication](#). These problems affect [around 30%](#) of people with peripheral artery disease. Intermittent claudication is more common in adults over 50, men and people who smoke.

Currently, peripheral artery disease treatments focus on managing symptoms and preventing the arteries from becoming more clogged, which will reduce the risk of heart disease and stroke. Medications may also be prescribed to reduce cholesterol or treat high blood pressure, which are both risk factors for developing peripheral artery disease.

Managing intermittent claudication is especially important as people who have it are at a [higher risk](#) of other cardiovascular diseases, such as heart disease and stroke. On top of this, the leg pain they experience means people often cannot walk very far. This could lead to [lower fitness levels](#) and reduced [quality of life](#). It may even cause [depression](#), as people are no longer as independent as they'd like to be in their daily life.

But [exercise programmes](#) may offer another treatment approach for people with intermittent claudication. Evidence from [our latest review](#) shows exercise can help increase the distance patients can walk pain-free, and [may reduce the risk](#) of heart disease and stroke. We also uncovered what it takes for an exercise programme to be successful.

We found that for people with intermittent claudication, a supervised, walking-based exercise programme is most likely to improve their symptoms. This programme should ideally be done at least three times per week for a minimum of three months. Patients should try to walk at a challenging pace (meaning it causes them to experience strong leg pain) for three to five minutes before resting until the pain goes away. The walk-rest pattern should be repeated for about 30 to 60 minutes.

This type of exercise programme was shown to significantly improve claudication symptoms, as indicated by an increase in the distance a person

can walk without pain. It also increases quality of life and overall fitness levels.

For those who can't access a supervised walking programme, this type of exercise can still be done independently, and should also be carried out at least three times a week for 30 to 60 minutes each time. We recommend people start walking regularly for exercise at their own pace, building up their walking speed and time gradually. Monitoring how far you walk with an app or smartwatch may be helpful. If you don't have those, street markers (such as lampposts) can help you check if you're walking a little further each day and make sure you are progressing the exercise.

For those exercising independently, we also recommend they plan their route as much as possible to identify places where they can rest safely in between their walking bouts and try to keep it as fun as possible, perhaps by walking with friends. Other [activities](#) that people with intermittent claudication can take part in safely include going to the gym, cycling, dancing, or bowls. There is less evidence for these how beneficial types of activities are, but they may help to improve symptoms and keep people engaged with the things they enjoy.

Our review also found that resistance exercise (such as lifting weights) can help to improve muscle strength in patients with intermittent claudication. Resistance exercises can be used alongside a walking programme and can be done two to three times per week with each session including exercises for the main muscles of the upper and lower body.

It's worth noting that people with intermittent claudication shouldn't worry about walking with leg pain because this pain does not equate to [harm](#) being caused. Claudication pain is thought to be a result of insufficient blood flow to the exercising muscle. Walking while experiencing claudication pain could, over time, stimulate the growth of new blood vessels in the legs and improve symptoms.

However, people are advised not to exercise if they feel unwell and should go and seek medical advice if they experience any concerning symptoms when they do exercise – such as chest pain, dizziness or sickness.

Our review shows exercise can help manage claudication pain, and may limit the progression of atherosclerotic disease throughout the body. Regular

exercise may improve claudication pain in [several ways](#), including improving the way blood vessels work and helping the leg muscles use oxygen more efficiently.

Not only can this exercise be done alone or as part of a supervised programme, but it may also have other benefits, including improving [cardiovascular health](#), [mood](#) and [sleep](#).

This article was originally published on [The Conversation](#), visit it [here](#).

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