

Claudication & Arterial Disease: Exercise

→ Summery

Walking and other exercises benefit patients with **peripheral arterial disease (PAD)**, including those with **intermittent claudication**. Exercise programs, even home-based, increase walking time and distance.

→ Indication & Benefits

Intermittent claudication is the most common symptom of peripheral arterial disease.

Intermittent claudication: calf pain, and at times proximal leg pain on exercise, which resolves with rest.

→ Contraindication and Adverse Effects

Precautions

People with PAD are at increased risk of cardiovascular disease, including stroke.

Appropriate footwear is required to reduce the risk of foot injury, especially as patients with PAD are predisposed to foot ulcers and infections.

→ Practical Description

Training

Exercise programs increase walking time and distance.

Specific details of effective exercise programs vary. The following is an example of a walking program, which follows the principles of interventions in published studies:

- Walk at an intensity that elicits severe claudication (pain level four out of five)
- Rest until pain subsides enough to resume
- Continue the walk-rest cycle of for 30 minutes to start with
- Gradually increase session time by five minutes increments, until 50-60 minutes of intermittent

walking can be achieved per session

- Aim to walk three to five days per week.

In supervised sessions, individual claudication thresholds and other cardiovascular parameters are monitored and workload is adjusted accordingly.

Tips and challenges

Some patients consider pain to be a sign of ongoing damage. They may need reassurance that ischaemic calf pain does not damage muscles.

→ Availability

Walking is a readily available activity.

Evidence suggests that motivated patients do better. Motivation may be improved by supervision, psychological interventions and with devices such as step-counters, which are widely available.

Although unsupervised home-based programs are beneficial, supervised programs are more effective.

Supervised training is available from some physiotherapists and exercise therapists.

Step counters are widely available and cost from \$10 to more than \$100.

→ Resources

Consumer Resources

Patient.co.uk has an excellent explanation of [peripheral arterial disease](#), including exercise and other lifestyle factors involved.

Medical Professionals

[Peripheral Arterial Disease](#) for Medical Professionals

→ Evidence

NHMRC Level I Evidence (systematic review of randomised controlled trials) for 'exercise'.

NHMRC Level II Evidence (randomised controlled trial) for home-based walking programs.

References

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