
RSNA Press Release

Exercise Improves Leg Pain Caused by Arterial Disease

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OAK BROOK, Ill. — Patients with leg pain caused by arterial disease may be able to forego treatment of the affected artery by participating in hospital-supervised exercise, according to a new study published in the February issue of *Radiology*.

Intermittent claudication is a painful leg condition affecting some patients with peripheral arterial disease. Various treatments are available, including drug therapy or endovascular revascularization, a minimally invasive technique that widens and restores blood flow to the affected artery.

"The results from our clinical trial demonstrate that after six and 12 months, patients with intermittent claudication benefited equally from either revascularization or supervised exercise," said the study's lead author, Sandra Spronk, Ph.D., researcher in the Department of Epidemiology and Radiology at Erasmus MC, University Medical Center in Rotterdam, Netherlands. "However, improvement is more immediate following revascularization."

For the study, 151 patients with intermittent claudication were randomly assigned to undergo revascularization or hospital-supervised exercise. Supervised exercise consisted of 30-minute, semi-weekly sessions of walking on a treadmill. Follow-up was performed after six and 12 months.

The patients who had undergone revascularization showed more immediate improvement. However, no significant differences were observed between the two groups after six months or 12 months with functional capacity and quality of life scores increasing for all patients.

"Revascularization is increasingly being performed as a first line of treatment," Dr. Spronk said. "This study emphasizes that all patients with intermittent claudication should initially be treated with exercise training, and that invasive procedures should be considered only if symptoms fail to improve."

At A Glance

- Patients with leg pain caused by peripheral arterial disease can be treated successfully with exercise.
- Endovascular revascularization to open the affected artery provides more immediate relief than exercise, but after six months to a year exercise provided equal benefits.
- Supervised exercise consisted of 30-minute, semi-weekly sessions of walking on a treadmill.

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"Intermittent Claudication: Clinical Effectiveness of Endovascular Revascularization versus Supervised Hospital-based Exercise Training-Randomized Controlled Trial." Collaborating with Dr. Spronk were Johanna L. Bosch, Ph.D., Pieter T. den Hoed, M.D., Ph.D., Hermanus F. Veen, M.D., Ph.D., Peter M. T. Pattynama, M.D., Ph.D., and M.G. Myriam Hunink, M.D., Ph.D. Journal attribution requested.

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