

Combining exercise, vessel-opening procedure reduces leg pain

19 November 2013

Supervised exercise combined with a procedure that opens clogged blood vessels reduces leg pain significantly better than exercise alone in patients with blocked blood vessels in the legs, according to a late-breaking clinical trial presented at the American Heart Association's Scientific Sessions 2013.

Endovascular Revascularization And Supervised Exercise (ERASE) Trial researchers studied 212 [patients](#) with leg pain caused by intermittent claudication, a condition in which patients suffer from pain in the legs due to poor circulation associated with blocked blood vessels. They assigned half of the participants to receive supervised exercise and the other half to undergo angioplasty or stenting procedures to open blocked blood vessels followed by supervised exercise.

Twelve months after treatment, patients who received the combined therapies walked about 282 meters (.18 miles or about three blocks) farther, and with less pain, than those in the exercise-only group. The [combined-therapy](#) group was able to increase their pain-free walking an average of one quarter of a mile farther than patients in the exercise-only group.

"Although guidelines recommend supervised exercise as initial therapy in patients with intermittent claudication, our data suggest that a combined therapy of the vessel-opening procedure followed by a [supervised exercise](#) program might be the best option," said Farzin Fakhry, M.Sc., lead author and a Ph.D. candidate at Erasmus University in Rotterdam, The Netherlands.

Researchers conducted the study in May 2010-March 2013 at 10 centers in the Netherlands. Participants underwent physical assessments including a treadmill test to measure walking duration and associated pain, and quality-of-life assessments at the beginning of the study, and after one, six and 12 months.

Intermittent claudication is a form of [peripheral artery disease](#) (PAD), a narrowing of the peripheral arteries, the blood vessels that bring blood to the legs from the heart. It occurs when blood vessels narrow or become blocked through atherosclerosis, the process of thickening and hardening of arteries.

PAD affects more than 8 million Americans each year. The most common symptoms include leg-muscle pain, cramping and fatigue with walking and other activities. Although the leg pain usually stops with rest, it can severely limit movement and quality of life, and often is an early sign of more serious illness, including heart disease and stroke.

Currently, patients seeking treatment for [leg pain](#) associated with blocked blood vessels for the first time usually receive only exercise therapy involving treadmill-walking sessions under medical supervision or angioplasty.

During the procedure to open blockages, doctors thread a tiny wire into the blocked vessel, which is then opened by inflating a small balloon. Often, a small, inserted wire-mesh tube called a stent is put in place at the site of the blockage to keep the blood vessel propped open.

"Based on our study results, this combined therapy of angioplasty or stenting plus [exercise therapy](#) should be considered as an initial treatment," Fakhry said.

Risk factors for developing narrow or blocked [blood vessels](#) in the legs include smoking, diabetes, and [high blood pressure](#) and cholesterol.

Provided by American Heart Association

APA citation: Combining exercise, vessel-opening procedure reduces leg pain (2013, November 19) retrieved 24 June 2022 from <https://medicalxpress.com/news/2013-11-combining-vessel-opening-procedure-leg-pain.html>

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