

Cardiac rehabilitation programs benefit patients after mini or mild stroke

September 22 2011

Cardiac rehabilitation, traditionally used after heart attack to prevent future heart problems, seems similarly effective for people who have a transient ischemic attack (TIA) or mild stroke, according to new research published in *Stroke: Journal of the American Heart Association*.

TIA, also called mini-stroke, is a warning sign. While causing little or no permanent injury to the [brain](#), patients are at high risk for subsequent, often debilitating strokes. In the study, researchers defined a mild stroke as one that didn't cause significant disability.

"Many of the risk factors that we worry about after a [heart attack](#) — high cholesterol, smoking, low exercise capacity and high blood pressure — also concern us after a TIA," said Neville Suskin, M.B.Ch.B., M.Sc., senior investigator of the study, medical director of the London Health Sciences Centre Cardiac Rehabilitation & Secondary Prevention Program and associate professor of medicine at the University of Western Ontario in London, Ontario, Canada. "We know that cardiac rehab addresses these risk factors in patients with heart conditions and wondered whether it was feasible, effective and safe for patients after TIA or mild stroke."

Suskin and colleagues assessed cardiac risk factors in 100 patients who had experienced a TIA or mild stroke in the previous year. Patients participated in an outpatient cardiac rehab program for approximately 7½ months and then were re-assessed for [risk factors](#). Researchers assessed the effectiveness of the rehab process, which included exercise;

drug management; nutrition education; smoking cessation; and addressing psychological issues such as stress, anxiety, or depression. Eighty patients completed the rehab process.

"Overall, following the cardiac rehab intervention, the TIA and mild stroke patients improved significantly in their risk profile," said Suskin who is also a scientist at Lawson Health Research Institute in London, Ontario, Canada.

Patients' peak exercise capacity improved by an average of about 31 percent by the end of cardiac rehabilitation.

Other findings include:

- Total cholesterol decreased by an average 11.6 milligrams per decilitre (mg/dl).
- Triglycerides decreased by 23.9 mg/dl.
- Low density lipoprotein (bad cholesterol) decreased by 9.3 mg/dl, while high density lipoprotein (good cholesterol) increased by 2.3 mg/dl (changes which were promising but statistically non-significant).
- Waist circumference decreased by 1 inch.
- Body mass index decreased by 0.5 kilograms per square meter (kg/m²) and body weight decreased by 3.2 pounds.
- Systolic blood pressure dropped by 3 millimeters of mercury (mm Hg) and diastolic declined by 2 mm Hg (these represent promising but statistically non-significant changes in blood pressure).
- A significant number of patients became non-smokers.

The researchers also reported that 11 more patients, who at program entry were at moderate or high risk of dying during the next year, after

cardiac rehab completion were recategorized to lowest risk of death.

"While a TIA or mild stroke may seem small, in reality these events are crucial warning signs of possible catastrophic stroke or heart attack," said Peter L. Prior, Ph.D., C.Psych., lead author of the study, clinical psychologist in the London Health Sciences Centre Cardiac Rehabilitation & Secondary Prevention Program and adjunct clinical professor in the Department of Psychology at the University of Western Ontario. "Our study is novel because it shows that [cardiac rehabilitation](#), involving structured programs in exercise, nutrition, smoking cessation and psychological services, is a feasible, potentially effective way for TIA or mild stroke patients to reduce their risk of strokes or heart attacks."

To confirm the results, the researchers are conducting a randomized controlled study, comparing the results of cardiac rehab in TIA or mild [stroke](#) patients, to a control group who receive only usual care.

Provided by American Heart Association

Citation: Cardiac rehabilitation programs benefit patients after mini or mild stroke (2011, September 22) retrieved 20 April 2024 from <https://medicalxpress.com/news/2011-09-cardiac-benefit-patients-mini-mild.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--