MedicalXpress

Physical fitness improves survival, prevents some heart attacks

November 17 2013

A new study highlights the importance of exercise and physical fitness among people with stable coronary artery disease. Researchers at the Johns Hopkins University School of Medicine and Henry Ford Hospital found that higher levels of physical fitness lower the risk of having heart attacks and increase survival in those with coronary artery disease, whether or not they have had a procedure to open up their blocked arteries.

"In our study, the patients who were most fit had a 75 percent lower risk of dying from any cause compared to those who were least fit. This was true regardless of whether the patient had previous stenting or bypass surgery to open up any blocked arteries," says lead author Rupert Hung, a medical student at the Johns Hopkins University School of Medicine.

Hung presented the findings in a poster presentation titled "The Prognostic Value of Exercise Capacity in Patients with Non-Revascularized and Revascularized Coronary Artery Disease: The FIT Project," on November 17, 2013, at the American Heart Association's Scientific Sessions in Dallas, Texas.

The study included information on more than 9,800 adults who had been diagnosed with coronary artery disease. All of the patients in the study had been referred by a physician to undergo a treadmill stress test and were followed for an average of 11 years to see whether they had a heart attack, had undergone a revascularization procedure to restore blood flow, or had died from any cause.

"We measured exercise capacity, expressed as metabolic equivalents, or METS, from the patients' stress test results. We found that each 1-MET increase in a person's exercise capacity was associated with a 13 percent reduction in risk of death, regardless of whether they had previously had a procedure to open a blocked artery," says co-investigator John W. McEvoy, M.B., B.Ch., a cardiology fellow at the Johns Hopkins University School of Medicine.

The researchers say their findings highlight the importance of physical activity and fitness among people with coronary artery disease.

"Improving and maintaining fitness should be a high priority for patients," says senior author Michael Blaha, M.D., M.P.H., an assistant professor of medicine at the Johns Hopkins University School of Medicine and a cardiologist with the Johns Hopkins Ciccarone Center for the Prevention of Heart Disease.

"Our results suggest that increasing physical fitness through cardiac rehabilitation programs and exercise may be an effective supplement to medications for preventing complications associated with coronary artery disease. We hope that as a result of this study, more physicians will consider prescribing physical activity as a front-line therapy to improve survival and quality of life for their patients who are able to safely exercise," says Blaha.

Provided by Johns Hopkins University School of Medicine