

Exercise capacity, heart rate response predict CAD outcomes

November 9 2015



(HealthDay)—Exercise capacity (EC) and heart rate responses to exercise are effective predictors of short-term outcome among patients with stable coronary artery disease (CAD), according to a study published in the Nov. 15 issue of *The American Journal of Cardiology*.

Antti M. Kiviniemi, Ph.D., from University of Oulu in Finland, and colleagues evaluated [exercise](#) testing in 1,531 patients with angiographically documented stable CAD who were treated with β -blockers. Age- and gender-adjusted EC, maximal chronotropic response index (CRI), and two-minute post-exercise heart rate recovery (HRR) were calculated. The composite primary end point was cardiovascular deaths and hospitalization due to heart failure over a two-year follow-up. An exercise test risk score was also calculated.

The researchers found that, independent of each other, abnormal EC, CRI, and HRR predicted the primary end point, involving 4.5-, 2.2-, and 6.2-fold risk, respectively. Compared to patients with a low-risk exercise test score, patients with intermediate and high [exercise test](#) risk scores had 11.1-fold ($P = 0.002$) and 25.4-fold (P

"The composite index of EC and [heart rate](#) responses to exercise and recovery is a powerful predictor of short-term outcome in [patients](#) with stable CAD," the authors write.

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2015 [HealthDay](#). All rights reserved.

Citation: Exercise capacity, heart rate response predict CAD outcomes (2015, November 9)
retrieved 28 April 2024 from
<https://medicalxpress.com/news/2015-11-capacity-heart-response-cad-outcomes.html>

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.
