

## Exercise capacity, heart rate response predict CAD outcomes

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(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  $\beta$ -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 <u>heart rate</u> responses to exercise and recovery is a powerful predictor of short-term outcome in <u>patients</u> with stable CAD," the authors write.

**More information:** Abstract

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