Exercise perfusion CT imaging IDs coronary stenosis

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(HealthDay)—For patients suspected of having hemodynamically significant coronary stenosis, exercise computed tomography (CT) myocardial perfusion imaging is feasible and accurate, according to a study published in the March issue of *Radiology*.

Michel Habis, M.D., from the Centre Medico Chirurgical Parly 2 in Le Chesnay, France, and colleagues examined the feasibility of exercise perfusion CT in 32 consecutive patients suspected of having hemodynamically significant coronary stenosis. Participants, who had 55 coronary stenoses of at least 50 percent, underwent coronary CT angiography. Within one minute after performing supine exercise on an ergometer secured to the CT table, CT myocardial perfusion imaging was performed. For each stenosis, the myocardial enhancement ratio between stenotic and normally perfused territories was determined.

The researchers found that a myocardial enhancement ratio cutoff of 0.8 performed best for identifying functionally significant stenosis in the per-patient analysis, with sensitivity of 95 percent, specificity of 90 percent, positive and negative predictive value of 95 and 90 percent, respectively, and accuracy of 94 percent. In the per-stenosis analysis, the corresponding values were 97, 96, and 96 percent.

"Exercise CT myocardial perfusion imaging is feasible and accurate for assessment of the functional significance of coronary stenosis," the authors write.

More information: Abstract
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