Single hs-cTnT measure, non-ischemic ECG can rule out AMI

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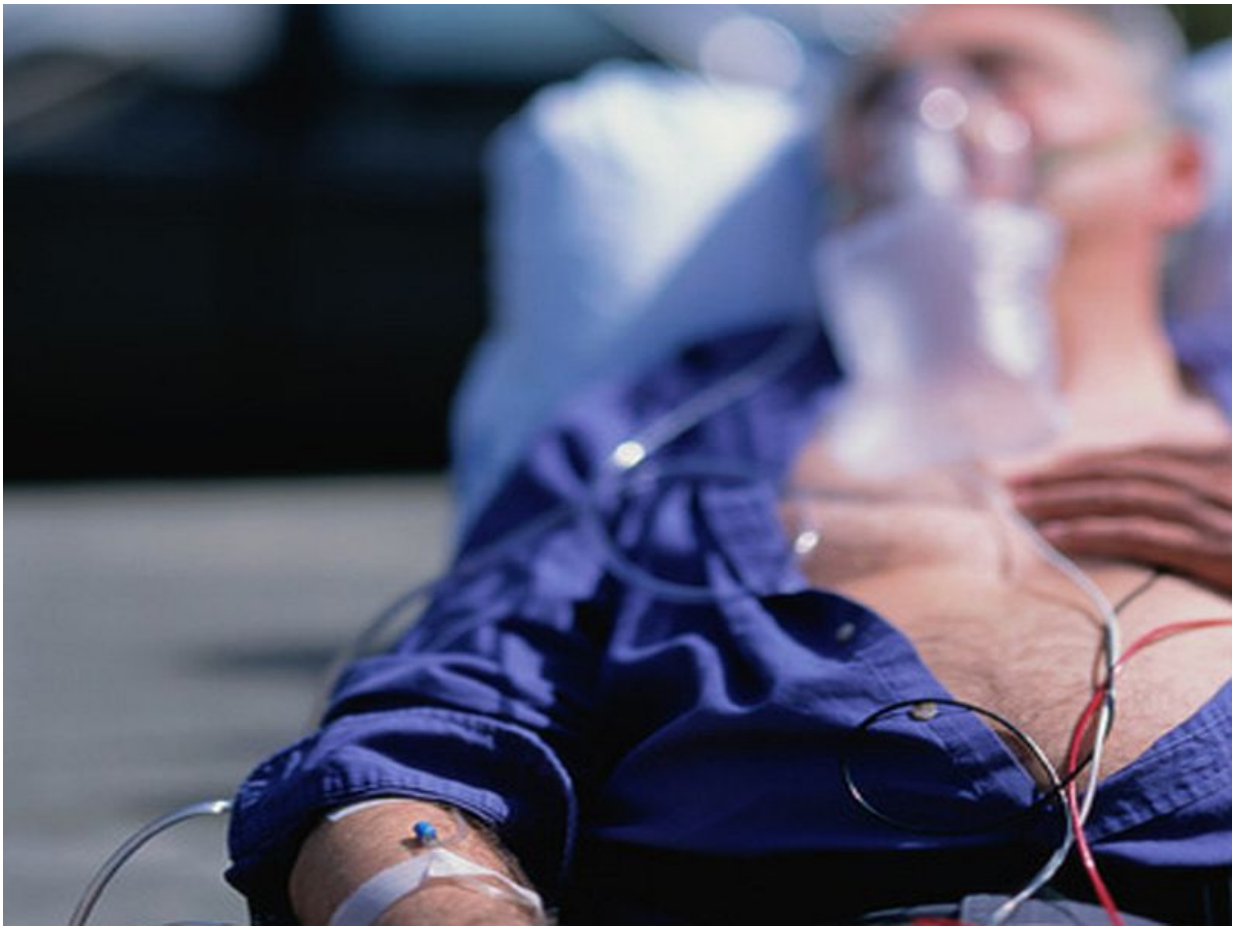

(HealthDay)—For adults presenting to the emergency department with

chest pain, a single high-sensitivity assay for cardiac troponin T (hs-cTnT) below the limit of detection and a non-ischemic electrocardiogram (ECG) can rule out acute myocardial infarction (AMI), according to a meta-analysis published online April 18 in the *Annals of Internal Medicine*.

John W. Pickering, Ph.D., from the University of Otago Christchurch in New Zealand, and colleagues examined cohort studies involving adults presenting to the emergency department with possible acute coronary syndrome to estimate the ability of a single hs-cTnT concentration below the limit of detection and a non-ischemic ECG to rule out AMI. Data were included for 9,241 patients in 11 cohort studies.

The researchers found that 30.6 percent of patients were classified as low risk. Overall, 0.5 percent of the low-risk patients had AMI. In individual studies, the sensitivity of the risk classification for AMI varied from 87.5 to 100 percent, with pooled estimated sensitivity of 98.7 percent. For 30-day major adverse cardiovascular events the sensitivity varied from 87.9 to 100 percent, with pooled sensitivity of 98.0 percent. There were no deaths reported among low-risk patients.

"A single hs-cTnT concentration below the limit of detection in combination with a non-ischemic ECG may successfully rule out AMI in patients presenting to emergency departments with possible emergency acute coronary syndrome," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

More information: Abstract/Full Text (subscription or payment may be required)