Serial hsTnT level IDs risk of 30-day adverse cardiac event

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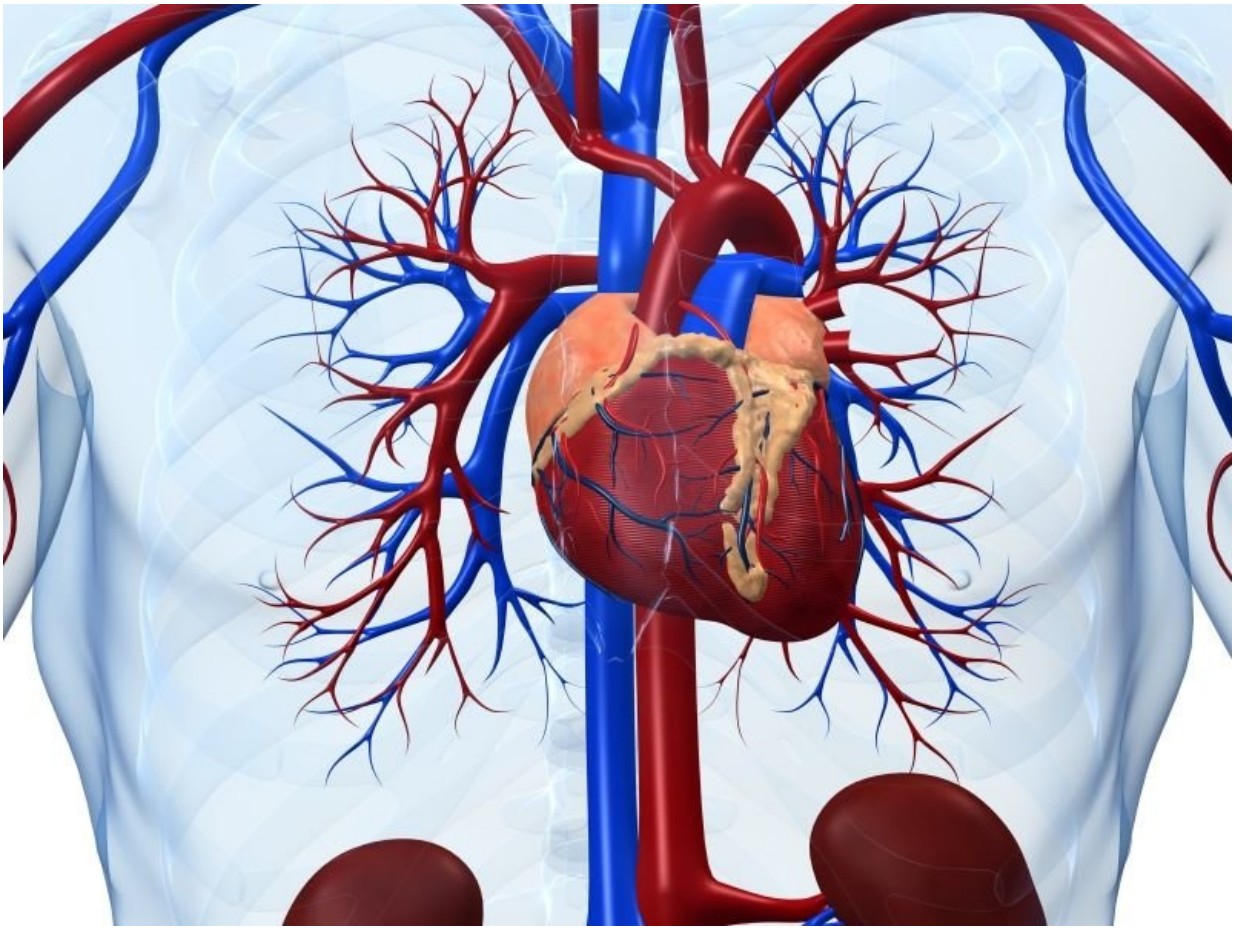

(HealthDay)—High-sensitivity troponin (hsTnT) assay can identify

patients presenting with suspected acute coronary syndrome at very low risk for 30-day adverse cardiac events (ACE), according to a study published online Dec. 13 in *JAMA Cardiology*.

W. Frank Peacock, M.D., from the Baylor College of Medicine in Houston, and colleagues conducted an observational study at 15 U.S. emergency departments to determine whether a negative hsTnT assay conducted at zero and three hours after presentation could identify the risk of 30-day ACE. Serial blood samples were collected from each patient at presentation, and at three, six to nine, and 12 to 24 hours later. The upper reference level for the hsTnT assay was 19 ng/L.

The researchers found that a single hsTnT level less than 6 ng/L at baseline had a negative predictive value for acute myocardial infarction (AMI) of 99.4 percent in 1,600 patients with suspected acute coronary syndrome. The negative predictive value for 30-day ACE was 99.3 percent in the 77.1 percent of patients with hsTnT levels of 19 ng/L or less at zero and three hours. For AMI, C statistics for women and men were similar using sex-specific cutpoints (0.952 and 0.962, respectively).

"A single hsTnT level less than 6 ng/L was associated with a markedly decreased risk of AMI, while serial levels at 19 ng/L or less identified patients at less than 1 percent risk of 30-day ACE," the authors write.

Several authors disclosed financial ties to pharmaceutical companies, including Roche Diagnostics, which funded the study.

More information: Abstract/Full Text
Editorial