New Diagnostic Test Detects Heart Attacks Faster

A high-sensitivity blood test will allow patients feeling chest pains to learn almost immediately whether they're having a heart attack.

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Doctors in emergency rooms will now be able to successfully diagnose heart attacks faster and more accurately with a new high-sensitivity blood test, according to new findings published in Circulation, a journal of the American Heart Association, reports a press release from the organization.

Cardiac troponin tests are commonly used to assess patients who enter the emergency room with heart attack symptoms, such as chest pains and shortness of breath. The evaluation measures the protein troponin, which is released into the blood when the heart is damaged.

For the study, researchers recruited 536 patients who were admitted to an ER with symptoms of a heart attack. Scientists compared the results of the new test with those from the conventional examination for the presence of troponin, which takes three hours to complete.

The new test ruled out heart attack in 30 percent of patients almost immediately and an additional 25 percent after one hour. Within three hours, the high-sensitivity exam ruled out cardiac arrest in 83.8 percent of patients compared with 80.4 percent using the conventional test.

"We did not miss any heart attacks using this test in this population," said Rebecca Vigen, MD, MSCS, a cardiologist at the University of Texas Southwestern Medical Center. "The test also allowed us to determine faster that many patients who had symptoms of a heart attack were not having a heart attack than if we had relied on the traditional test."

Annually, up to 10 million people are admitted into ERs for chest pains. Quickly and accurately determining whether individuals are having a heart attack can save many lives.

Click here to learn how stress activity in one area of the brain may predict risk of heart attack and stroke.

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