HealthManagement
Promoting Management and Leadership

# More sensitive blood test diagnoses heart attacks in ER faster

Patients who present to emergency rooms with heart attack symptoms – i.e., chest pain and shortness of breath – often undergo a cardiac troponin test to help doctors assess their condition. There is a new high-sensitivity blood test for cardiac troponin that can accurately rule out heart attack in emergency room patients faster than the conventional method, according to new research in the American Heart Association's journal Circulation.

The new, more sensitive blood test was also found to be safe and effective based on a study of 536 patients who were admitted to an emergency room with heart attack symptoms. The study was funded by the U.S. National Center for Advancing Translational Sciences of the National Institutes of Health.

"We did not miss any heart attacks using this test in this population," said lead author 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."

Recently the U.S. Food and Drug Administration approved a high-sensitivity troponin test already used in Europe. Dr. Vigen and colleagues developed a procedure for assessing the results of the new test and compared it to existing practice using a conventional troponin test, which takes three hours to complete.

The new procedure successfully "ruled out" 30 percent of patients immediately and an additional 25 percent at one hour, according to Dr. Vigen's team. By three hours, the new procedure ruled out heart attack in 83.8 percent of patients compared with 80.4 percent using the conventional test.

"We anticipate that this procedure will allow many patients with chest pain to be given a 'yes' or 'no' diagnosis of whether they are having a heart attack faster," said Dr. Vigen, who hopes clinicians from other institutions will learn from these results.

Source: American Heart Association
Image Credit: Pixabay

Published on : Wed, 8 Aug 2018