TROPONIN TEST MAY AID HEART ATTACK DIAGNOSIS IN WOMEN

Learn more about how troponin levels in men and women differ and how Abbott’s troponin test may identify signs of heart attack earlier in women.

Structurally, men and women’s hearts are built the same. But when the heart is in trouble, the outside signs vastly differ by gender.

Not only can women display different heart attack symptoms than men, but pinpointing heart trouble in women could also be more difficult for doctors.

What is troponin?

If doctors suspect a heart attack, they often conduct a test to measure troponin proteins in the blood. The proteins are released by the body when the heart muscle has been damaged, such as when a heart attack occurs, according to the National Institutes of Health. The more damage to the heart, the greater the amount of troponin in the blood.

Women do not produce as much troponin protein as men, which may mask a serious heart condition and lead to delayed treatment. Researchers discovered that peak troponin levels were four times lower in female hospital patients than in male hospital patients, according to a study published by the journal Pathology. Since the troponin levels guide health providers in treatment decisions, lower levels contribute to less aggressive treatment in women. This means women could return home untreated or face delayed heart attack treatment.

New test may enhance detection

A test developed by Abbott may help remedy the troponin dilemma. The tool, called the ARCHITECT STAT High Sensitive Troponin-I test (currently available outside the U.S.), can identify very low levels of cardiac troponin. The test, run in a laboratory setting, measures troponin in a patient’s serum and plasma.

A study in The Lancet shows that the ARCHITECT STAT High Sensitive Troponin-I test successfully aided doctors in identifying people at risk for heart attack and helped physicians make treatment decisions about which people should stay in the hospital. Another analysis published by the Journal of the American College of Cardiology found the high sensitive troponin test may also detect whether stress — mental and physical — triggers an inadequate oxygen supply to the heart among people with coronary artery disease.

The test may greatly benefit women since their peak troponin levels are more difficult to detect. Using Abbott's highly sensitive test, doctors could have the information needed for quicker treatment decisions to potentially save more women's lives and get them back to better health.

Differing danger signs: What you should know

When watching a heart attack play out on the big screen, it's common to see an actor clutching their chest. It's true that chest pain is a heart attack symptom for both sexes, but men more than woman experience the effect. Women are more likely to experience subtle heart attack symptoms, according to the Cleveland Clinic.
It's important for women to be able to recognize the gender-specific signs and symptoms of a heart attack, which may include:

- Intense fatigue that occurs after everyday activities, like doing laundry or walking the dog.
- Spontaneous shortness of breath or sweating without exertion or when simply lying down.
- Pain in the neck, back or jaw that may start in the chest or jaw and spread to the back or either arm.
- A cold, clammy feeling that materializes without cause.

For more information on heart attacks in women, click here.

Read more about troponin.