Diagnostic Heart Tests Function Differently for Women, Men

Research from Duke Clinical Research Institute shows that tests used to diagnose and assess the severity of coronary artery disease appear to function differently for women and men who have stable symptoms. The findings were presented at the American College of Cardiology Scientific Sessions meeting in Chicago and add new insights into the differences between men and women who have been diagnosed with heart disease.

Data from the PROMISE study (Prospective Multicenter Imaging Study for Evaluation of Chest Pain) showed that both men and women had heart attacks and other events at the same rate regardless of whether they were assessed using a computed tomographic angiography (CTA) or a functional stress test. But the frequency of a positive test differed between the two test types. Thus, the ability to predict an event based on test findings was not the same for CTA vs. stress testing.

CTA proved to be more predictive than stress testing because greater number of women had a positive stress test but a smaller proportion went on to have a coronary event such as death, heart attack or any other heart problem leading to hospitalisation. In comparison, a stress test showed positive finding for heart disease less often in men as compared to CTA but the predictive value of both tests was roughly similar.

"In the main PROMISE study analysis, the rates of coronary events were similar whether patients were tested with CTA or a stress test," said lead author Neha Pagidipati, M.D. of DCRI. "Our analysis delved a little deeper to determine if there were subtle differences between the sexes associated with using these diagnostic tests."

The authors believe that this difference is statistically significant. However, the results are not sufficient to provide a basis for recommending that all women should undergo CTA instead of stress tests. The findings do highlight the need for further evaluation of this question.

Source: Duke Research Clinical Institute
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