Top Things To Know
Role of Noninvasive Testing in the Clinical Evaluation of Women with Suspected Ischemic Heart Disease

1. Evidence is accumulating that the pathophysiology of coronary atherosclerosis is multifactorial. This includes obstructive coronary artery disease (CAD) and dysfunction of the coronary microvasculature and endothelium. As such, the term "ischemic heart disease" best describes the varied pathophysiology in women.

2. The aim of this paper is to limit the use of more expensive non-invasive and invasive imaging procedures in settings that would be considered ambiguous.

3. This paper reviews the evidence to make evidence-based recommendations for diagnosis and risk assessment of the full range of patterns of coronary heart disease in women.

4. An update is provided on candidacy (appropriate) of the use of exercise treadmill testing with ECG, stress echocardiography, stress myocardial perfusion imaging (MPI), with SPECT, PET, stress CMR, and coronary computed tomographic angiography (CCTA).

5. This paper focuses on two patterns of clinical disease: inducible ischemia due to obstructive coronary artery disease, and the identification of the extent and severity of myocardial ischemia from coronary vascular dysfunction in non-obstructive CAD, leading to the elevation of ischemic heart disease risk (better prognostic accuracy for major adverse IHD events) in symptomatic women.

6. Non-obstructive CAD is more common in women than in men.

7. Women with “non-obstructive” CAD and stress test abnormalities are no longer considered “false-positives,” but the testing is classified as abnormal and at elevated ICH risk.

8. Consideration for appropriate diagnostic testing should be given to assessing women at risk, using stratification including low, intermediate, or high risk for ischemic heart disease. Special attention should be given to a woman’s age and presence of high blood pressure or diabetes.

9. When considering functional capacity, using factors such as activities of daily living should help healthcare providers understand where on the spectrum of inclusion in diagnostic testing a woman falls.

10. Typical patterns of CAD symptoms include chest pain and/or discomfort. Symptoms in women are usually more often associated with mental or emotional stress and less frequently with physical exertion. Women report more epigastric discomfort, nausea, radiation of discomfort to arms, neck, inter-scalpular areas, dyspnea, and fatigue.

11. Clinicians should work with women to discuss the risks and benefits of certain diagnostic tests as they relate to unique issues related to women’s health (e.g., women of childbearing potential).

12. Future research is needed to assimilate sex-specific issues into inclusive clinical guidelines and into everyday clinical practice.


© 2014, American Heart Association. All rights reserved.