

WOMEN MDs ENDORSE HEART SCANS: FOUR WAYS TO INCREASE AWARENESS

NOT JUST FOR WOMEN

Although women are the targeted group of patients in AMWA's campaign, men can also benefit from nuclear imaging.

"There's a need that is being recognized for cardiac tests that perform equally well in men and women," said D. Douglas Miller, MD, the director of nuclear cardiology and cardiovascular biology at St. Louis University Medical Center. "Researchers have worked hard to fine tune myocardial perfusion scintigraphy to make it more effective and gender neutral." For instance, he said technetium agents and gated SPECT imaging (*J Nucl Med* 1995;36:952.) have led to advances in attenuation correction, which have reduced the problem of artifacts in obese patients and in women with dense breasts.

MYOCARDIAL PERFUSION IMAGING is often a more reliable predictor of heart disease in women than the standard stress EKG test. As a nuclear medicine practitioner, you are probably well aware of this. But the question remains: How can you convince a referring physician that nuclear imaging should be the top tool for diagnosing many cases of heart disease?

In an effort to address this problem, the American Medical Women's Association (AMWA) has kicked off a three-year campaign to educate doctors about heart disease and women, and one aspect they are emphasizing is nuclear imaging tests for diagnosis. The association trained 40 women physicians on coronary heart disease and the female patient. In turn, these physicians have given 35 workshops at hospitals throughout the country for internists, family practitioners, cardiologists and gynecologists with another 37 planned for the upcoming year.

"I need a discriminating functional test that answers my questions and doesn't have a high rate of false-positives or negatives," said project leader Debra R. Judelson, MD, a cardiologist with the Cardiovascular Medical Group of Southern California in Los Angeles. "Myocardial perfusion imaging provides me with that test. It is more predictive than the standard stress EKG and, in my opinion, than stress echocardiography."

Judelson is trained as a clinical cardiologist and says she chooses which diagnostic test to perform based on research, discussions with other specialists and her own personal experience with patients of different genders. "For a middle-aged white male, a stress EKG is often a wise choice for the initial screening," she said. For women with heart disease risk factors, however, Judelson often goes straight to nuclear imaging since she's seen numerous female patients who have had normal EKGs only to have a perfusion scan indicating severe coronary artery disease.

Given the growing realization that female heart disease patients need a better diagnostic screening test, myocardial perfusion scintigraphy should be entering its prime. *Newsline* asked the leaders of the AMWA campaign to suggest ways to get the word out at your own institution.

• **Communicate with Cardiologists:** "I don't just want to know if a result is normal or abnormal," said Judelson. "I want to be told the extent of the coronary disease, which vessels are blocked and what treatment I should recommend." She stresses

that it is important for a nuclear physician to have access to the clinical examination notes and results from tests performed before scintigraphy. Likewise, cardiologists should receive and be guided through the results of the nuclear scans.

• **Integrate with Other Departments:** Although each hospital is set up differently with specific procedures delegated to various departments, you can still have some control over the system. At St. Louis University Medical Center, cardiologists and nuclear physicians perform cardiac imaging studies conjointly. The cardiologists perform the stress portion taking the patient through the exercise routine or injecting them with a drug to stress the heart; the nuclear physicians administer the radiopharmaceuticals and perform the actual scans. "At the end of each day, we all sit down together and go over the results of the scan," said nuclear cardiologist D. Douglas Miller, MD, at St. Louis University. "Combining our training backgrounds enables us to conduct a more complete evaluation."

• **Know the Competition:** When trying to convince referring physicians of the value of nuclear imaging, it helps to compare it with the other diagnostic tests available. For example, the standard stress EKG test is known to have a low predictive value in women. Research studies have shown that the sensitivity rate for the stress EKG is 60% in women compared to a rate of 90% for myocardial perfusion imaging using ^{99m}Tc-sestamibi; the specificity rate for the EKG test is 70% versus 90% for nuclear imaging.

Certain limitations also exist for stress echocardiography. "It hasn't been studied that extensively in women compared to scintigraphy," said nuclear cardiologist Gary V. Heller, MD, an associate professor of medicine at the University of Connecticut School of Medicine. Women normally have a lower ejection fraction in their vessel function than men, so cardiologists have a tougher time ascertaining abnormalities in women.

• **Participate in Grand Rounds:** You can organize a discussion on heart disease or bring in a speaker who's an expert on myocardial perfusion imaging at the weekly continuing medical education meetings at your hospital. "Grand rounds usually draw in primary care physicians and serve as a good avenue for education," said Heller. AMWA can provide kits on giving a talk yourself or a list of speakers; call Janice Tracey at (703) 838-0500.

Deborah Kotz