involving the use of myocardial contrast agents, may allow this method to form the new cornerstone of noninvasive assessment of chest pain in women.

We propose that, when accessible, dobutamine stress echocardiography be considered as the initial diagnostic test in preference to exercise electrocardiography in women with uninterpretable ST segments and as a second-line screen in all those with intermediate to high postexercise test risk of coronary artery disease. Myocardial perfusion scintigraphy should be reserved for women with poor echocardiographic windows or those who are unable to tolerate the dobutamine.

David J. Brull
John G. Coghlan
John Buscombe
Royal Free Hospital
London, England

REFERENCES

1. Santana-Boado C, Candell-Riera J, Castell-Conesa J, et al. Diagnostic accuracy of technetium-99m-MIBI myocardial SPECT in women and men. *J Nucl Med.* 1998;39:751–755.
2. Cacciabaudo JM, Hachamovitch R. Stress myocardial perfusion SPECT in women: is it the cornerstone of the noninvasive evaluation? *J Nucl Med.* 1998;39:756–759.
3. Diamond GA. Reverend Bayes silent majority: an alternative factor affecting sensitivity and specificity of exercise electrocardiography. *Am J Cardiol.* 1986;57: 1175–1180.
4. Dionisopoulos PN, Collins JD, Smart SC, Knickelbine TA, Sagar KB. The value of dobutamine stress echocardiography for the detection of coronary artery disease in women. *J Am Soc Echocardiogr.* 1997;10:811–817.
5. Takeuchi M, Sonoda S, Miura Y, Kuroiwa A. Comparative diagnostic value of dobutamine stress echocardiography and stress thallium-201 single-photon-emission computed tomography for detecting coronary artery disease in women. *Coronary Artery Dis.* 1996;7:831–835.

REPLY: Recent data indicate that there is no gender-based difference in diagnostic accuracy of dobutamine echocardiography (*1*) and stress perfusion scintigraphy (*2*) in detecting coronary artery disease, mainly if the silent majority is considered (*3*). Therefore, both tests are an adequate alternative to a nondiagnostic exercise electrocardiography test.

It is generally accepted that stress echocardiography may be more specific than stress perfusion scintigraphy and that this test is more sensitive than stress echocardiography (*4*). Thus, stress perfusion scintigraphy would be indicated in patients with high prevalence of coronary artery disease, and stress echocardiography in patients with low prevalence. However, specificity values of dobutamine echocardiography in the silent majority, reported by Brull et al. and by Dionisopoulos et al. (*1*) in the select minority (74% and 79%, respectively), are clearly lower than our own (91%) in the silent majority of women (*3*). Our results should prompt us to consider stress myocardial scintigraphy also in women with low prevalence of coronary artery disease.

According to the variability of all these data, which may indicate different characteristics of patients, methods, level of operator skill and interpretation criteria, we do not think it advisable to propose, as Brull et al. do, dobutamine echocardiography as the initial diagnostic test when results of exercise electrocardiography are uninterpretable, with perfusion scintigraphy being reserved for women with poor echocardiographic windows or who are unable to tolerate dobutamine. From our point of view, both tests have similar indications, and each hospital, depending on different factors such as feasibility and experience, should decide which test is preferable for each patient, either woman or man.

Jaume Candell-Riera
César Santana-Boado
Joan Castell-Conesa
Santiago Aguadé-Bruix
Hospital General Universitari Vall d'Hebron
Barcelona, Spain

REFERENCES

1. Dionisopoulos PN, Collins JD, Smart SC, Knickelbine TA, Sagar KB. The value of dobutamine stress echocardiography for the detection of coronary artery disease in women. *J Am Soc Echocardiogr.* 1997;10:811–817.
2. Takeuchi M, Sonoda S, Miura Y, Kuroiwa A. Comparative diagnostic value of dobutamine stress echocardiography and stress thallium-201 single photon-emission computed tomography for detecting coronary artery disease in women. *Coronary Artery Dis.* 1996;7:831–835.
3. Santana-Boado C, Candell-Riera J, Castell-Conesa J, et al. Diagnostic accuracy of technetium-99m-MIBI myocardial SPECT in women and men. *J Nucl Med.* 1998;39:751–755.
4. O'Keefe JH, Barnhart CS, Bateman TM. Comparison of stress echocardiography and stress myocardial perfusion scintigraphy for diagnosing coronary artery disease and assessing its severity. *Am J Cardiol.* 1995;75:25D–34D.

Inverse Correlation Between ^{99m}Tc-Tetrofosmin Uptake and P-Glycoprotein in Non–Small Cell Lung Cancer

TO THE EDITOR: We read with interest the article by Kostakoglu et al. (*1*) in which they report an inverse correlation between the tumor-to-normal tissue uptake ratio and the expression of P-glycoprotein (Pgp) determined by immunohistochemistry in 46 patients with lung cancer (26 squamous cell carcinomas and 20 small cell carcinomas). We would like to describe our experience with ^{99m}Tc-tetrofosmin (TF), another Pgp substrate (*2*), in patients with non–small cell lung cancer (NSCLC) and its correlation with Pgp expression determined by immunohistochemistry.

A total of 18 patients (17 men, 1 woman; age range 52–83 y) with NSCLC (2 with undifferentiated large cell carcinoma, 5 with adenocarcinoma and 11 with squamous cell carcinoma) were studied by ^{99m}Tc-TF and thoracic SPECT. The ^{99m}Tc-TF study was performed during the week before surgery. It involved the intravenous administration of 740 MBq (20 mCi) ^{99m}Tc-TF for the acquisition, 10 and 60 min later, of anterior and posterior planar images. SPECT acquisition was performed at 70 min. Image processing included semiquantitative analysis of the uptake in certain areas of interest outlined in transverse, coronal and sagittal SPECT sections to compare the counts in tumor tissue with those registered in healthy tissue, which provided the ^{99m}Tc-TF uptake index. Paraffin-embedded samples were taken for immunohistochemical staining using JSB-1, a monoclonal antibody that binds to an internal epitope of Pgp, at a dilution of 1:20. The results were considered to be positive when >10% of the visible cells were stained.

The immunohistochemical study of the 18 tumors identified 12 Pgp-positive lesions (2 adenocarcinomas, 2 undifferentiated large cell carcinomas and 8 squamous cell carcinomas) and 6 Pgp-negative lesions (3 adenocarcinomas and 3 squamous cell carcinomas).

For the Pgp-positive tumors, size ranged between 2.0 and 6.5 cm in largest diameter (mean 3 ± 1.2 cm), between 15% and >60% of