divergence between the uptake of DMSA and the glomerular filtration rate has been documented (*4*). This further supports the notion that DMSA uptake reflects "functioning tubular mass" as opposed to "global renal function."

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Reversible Thallium-201 Perfusion Defects in Right Bundle Branch Block and Normal Coronary Angiogram

TO THE EDITOR: In a recent paper published in *The Journal of Nuclear Medicine* (*1*), Dr. Wei-Jen Shih and colleagues describe a case of reversible ^{201}Tl perfusion defect of the septal and inferoapical segments in a patient with incomplete right bundle branch block (IRBBB) and normal coronary angiogram.

From the above paper, it seems that the authors have linked IRBBB with the finding of ^{201}Tl perfusion defect during exercise testing. We would like to express our doubts concerning the linkage suggested between IRBBB and the ^{201}Tl stress test.

It is well known that 1%–3% of all myocardial infarctions occur without demonstrable evidence of significant coronary atherosclerosis (*2,3*). This percentage may be as high as 17% in patients less than 36 yr old (*4*). The etiology is probably vasospasm with a higher incidence of coronary spasm related to acute myocardial injury in the inferior wall when compared to anterior wall infarction (*5–7*). Indeed, the case we refer to shows a perfusion defect in the inferior wall.

It is well accepted that isolated RBBB in a young and apparently healthy individual cannot, of itself, be taken to indicate prima facie evidence of organic heart disease and shows no increased incidence of coronary ischemic heart disease (*8*).

In the light of the above facts together with the relatively young age (34 yr) of the patient described by Shih et al., it is more logical to say that what the authors have described is a case of a coronary spasm event in a relatively young patient and that there is no connection between the IRBBB found in this patient and the perfusion defect shown during the stress thallium scan.

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REPLY: We thank Drs. Margulis and Golan for reading and commenting on our recent paper (*1*). Although our patient was relatively young (34 yr) with incomplete right bundle branch block (IRBBB), his clinical manifestations and coronary risk factors (heavy smoking for 22 yr and family history of heart disease) justified proceeding with ^{201}Tl myocardial imaging, which yielded reversible defects and subsequently led to a coronary angiogram. We could not ignore these factors just because of the individual's relative youth.

We agree that isolated right bundle branch block may occur in normal patients (*2–4*). We also agree that myocardial infarction can occur in young patients without demonstrable evidence of significant coronary atherosclerosis. There are multiple suggested mechanisms by which patients with normal epicardial coronary arteries can have myocardial ischemia, including vasospasm, as Drs. Margulis and Golan suggest, as well as embolic events, small vessel disease (*5–7*) and myocardial injury involving the inferior wall more often than the anterior wall. Reversible redistribution of our patient's ^{201}Tl images mainly involves the septal wall and the inferoapical wall. Actually, those references (*5–7*) regarding coronary artery spasm relating to myocardial infarction or ischemia indicate preferable involvement of the septal wall.

In rare instances, exercise can induce coronary spasm, resulting in reversible ^{201}Tl perfusion defects without significant coronary stenosis. In the previous reports, the patients with exercise-induced reversible perfusion defects are almost always accompanied by typical exertional angina and ST-segment elevation on ECG (*8–12*). Our patient did not have angina nor ST-segment elevation during his treadmill exercise test. Thus, our patient's reversible defects are not likely due to exercise-induced coronary spasm. As a matter of fact, exercise ^{201}Tl SPECT in patients with various types of intraventricular conduction disturbance may result in a false-positive scan in the septal wall (*13*). In that report, patients with transient septal defect included two patients with RBBB and 11 patients with RBBB and left-axis deviation. Our results agree with their findings (*13*).

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Iodine-131 Characteristics

TO THE EDITOR: I have a right to expect that writers, editors and especially reviewers of articles about contamination from ^{131}I would know the characteristics of the nuclide. When ^{131}I decays, about 0.7% becomes ^{131m}Xe. Seven-tenth percent is a negligible amount of the usual dose of ^{131}I, but when Ibis and Beierwaltes talk about gigabecquerels, that tiny amount becomes many megabecquerels of a heavy gas with a 12-day half-life. This medium-energy level gamma-emitting gas is not easily confined in open air space. Thus, when an ^{131m}Xe patient's handlers are "tested for contamination" by measuring their thyroid uptakes, I expect nuclear medics, especially Beierwaltes, to know that the thyroid will be silent. Only moronic NRC inspectors want the thyroid tested for ^{131m}Xe.

I published this decay data in 1968 but learned about it before 1950 from people who published it following the first "failure" of the Hanford reactor in 1944. That is almost a half century ago. Please tell your reviewers that sometimes a decay product of a nuclide is also radioactive. That fact was published by Rutherford in 1898, almost a hundred years ago. Do you people know that there is a very good library down the road from your office?

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