

**TO THE EDITOR:** The abstract entitled "Radiation Dosimetry of Indium-111-Labeled Granulocytes", published in *JNM* (1994; 35:159P) and presented at the 41st Annual Meeting of the Society of Nuclear Medicine, contained certain errors relating to incorrect estimates of lung and renal masses. The corrected radiation dosimetry values for these and other organs are listed in Table 1.

We apologize for these errors and for any inconvenience

**TABLE 1**  
Dosimetric Values for Indium-111-Granulocytes

Organ	Dose (mGy/MBq)	Dose (rads/mCi)
Kidney	0.51 ± 0.10	1.88 ± 0.38
Lungs	0.42 ± 0.09	1.55 ± 0.34
Liver	1.58 ± 0.45	5.85 ± 1.68
Bone marrow	0.78 ± 0.23	2.90 ± 0.83
Spleen	4.11 ± 1.77	15.2 ± 6.6
Testes	0.021 ± 0.009	0.078 ± 0.03
Ovaries	0.13 ± 0.02	0.49 ± 0.06
Whole body	0.17 ± 0.03	0.65 ± 0.12

caused to you and to readers of *JNM*.

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### Fast Acquisition for Technetium-99m Sestamibi SPECT

**TO THE EDITOR:** DePuey et al. (1) reports the rapid acquisition of myocardial SPECT images with <sup>99m</sup>Tc-MIBI. The authors have shown that the imaging time can be reduced to 8 min for stress studies and 10 min for rest studies with a single-head camera without sacrificing image quality. The study, however, used a 2-day protocol, which is inconvenient for patients and delays the diagnosis when compared to a 1-day protocol.

We previously reported our early results in 20 patients who had both rapid and conventional MIBI SPECT studies using a 1-day rest/stress protocol (2). We used 7 mCi MIBI for the rest studies compared to the 22 mCi used by DePuey et al. The stress dose was 23 mCi. Patients were scanned in the morning for 10 min and again for 30 min 1 hr after injection at rest. The order of the studies was randomized. Patients returned in the afternoon and were scanned for 5 min and again for 30 min one-half hour after stress imaging in the same order as the morning acquisitions. The 5- and 10-min images were acquired with a general, all-purpose collimator using continuous acquisition over a 180° arc. The images were processed with a 0.35/5 Butterworth filter. The 30-min images were acquired in step-and-shoot mode using a high-resolution collimator. Rest images were processed with a 0.40/5 Butterworth filter and stress images were processed with a 0.52/10 Butterworth filter. Images were read without knowledge of the clinical history

or imaging protocol. Scans were correlated with the results of coronary arteriography in all cases. Stenoses ≥50% were considered significant.

On a vessel-by-vessel basis, the sensitivity and specificity of the rapid protocol was 18/33 (55%) and 21/27 (78%), respectively, whereas the values for the conventional protocol were 12/33 (36%) and 24/27 (89%). The lower sensitivity for the conventional protocol was surprising, but it may be due to the small sample size. We are currently analyzing the results in the first 40 patients. We have found that the quality of images acquired with the rapid protocol is excellent in nonobese patients. Image quality is progressively degraded by attenuation and scatter as weight increases. We have switched from thallium to MIBI for all of our routine myocardial perfusion studies because of the great savings in time. Obese patients, however, are still imaged for 30 min. Depuey et al also measured the chest circumference of their patients but did not correlate image quality with body habitus. It would be interesting to know whether a 2-day protocol with a higher resting dose of MIBI results in sufficiently good image quality to allow the rapid technique to be used in obese patients.

### REFERENCES

- DePuey EG, Nichols KJ, Slowikowski JS, Scarpa WJ, Smith CJ, Melancon S, Newman S. Fast stress and rest acquisitions for technetium-99m-sestamibi separate-day SPECT. *J Nucl Med* 1995;36:569-574.
- Segall GM, Stepp C, Atwood JE. Rapid acquisition of myocardial SPECT images with a single-head gamma camera using Tc-99m MIBI. *Clin Nucl Med* 1994;19:840.

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**TO THE EDITOR:** A 37-yr-old woman was referred for <sup>111</sup>In-DTPA cisternography to investigate a possible cerebrospinal fluid (CSF) leak subsequent to an earlier automobile accident. The patient was a nursing mother with an 8-mo-old child. Potential radiation dose to the child was a concern due to activity in the breast milk. Therefore, a review of the literature regarding <sup>111</sup>In-DTPA in breast milk was made.

A recent radiopharmaceutical textbook, under the heading precautions for cisternography during breastfeeding and pregnancy, states that "... it is not known whether this radiopharmaceutical is excreted in human breast milk" (1). The literature disclosed additional studies involving <sup>99m</sup>Tc-DTPA (2,3), <sup>111</sup>In-leukocytes (4) and <sup>113m</sup>In chelate complex (5) in breast milk for various nuclear medicine procedures, but none for <sup>111</sup>In-DTPA cisternography studies.

Consideration of plausible kinetic pathways for the radiopharmaceutical, however, allowed reasonable conjecture concerning the ultimate fate of the radioactivity. If there was no leak, the radioactivity would be confined to the mother's CSF. If there was a leak, the DTPA would be cleared by the mother's kidneys. If the <sup>111</sup>In dissociated from the DTPA, the <sup>111</sup>In would be expected to concentrate in the mother's liver and spleen.

Because of the relative small amount of radioactivity (500 μCi) used in the normal diagnostic dose, the likelihood that large quantities of radioactive indium would appear in the breast milk was