a prospective clinical trial was performed at RMH. From June 1990 through February 1991, a total of 33 patients received MCP for RGE study. There were 23 female patients age 61.7 ± 16.2 yr (mean ± s.d.) with age range 28–87 yr. There were ten male patients of age 54.9 ± 19 yr (age range 14–80 yr). Of those patients, one female subject (age 30 yr, weight 65 kg) reported only, "My head feels numb; I feel strange all over." No treatment of the reaction was instituted, and it spontaneously ended after a few moments. The hospital's adverse reaction committee judged it to be a very mild reaction. No akathisic episode occurred during the trial.

The nuclear medicine clinician and technologist should be aware of this bizarre iatrogenic reaction to MCP and a means for its alleviation, so as to salvage as much diagnostic data from RGE as possible.

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Serum Thyroglobulin and Whole-Body Iodine-131 Scan in the Management of Differentiated Thyroid Carcinoma

TO THE EDITOR: Ronga et al. (*1*) recently compared serum thyroglobulin (Tg) measurement and ^{131}I whole-body scan (WBS) for the diagnosis of residual tumor or metastases in post-surgical patients with differentiated thyroid carcinoma. It is difficult to understand their assertion that when both tests are considered, both sensitivity and specificity are increased relative to either test considered alone. The process of considering both tests implies defining positivity in one of the two following ways: (a) Tg *and/or* WBS positive or (b) Tg *and* WBS positive. The first definition could increase sensitivity and decrease specificity by adding to the number of true- and false-positives. The effect of the second definition would be the opposite. Logically, neither definition could effect improvement of both sensitivity and specificity.

REFERENCE

1. Ronga G, Fiorentino A, Paserio E, et al. Can iodine-131 whole-body scan be replaced by thyroglobulin measurement in the post-surgical follow-up of differentiated thyroid carcinoma? *J Nucl Med* 1990;31:1766–1771.

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REPLY: The comment made by Dr. Klein is correct, but it is not appropriate for our study. This is because we took in consideration different criteria in defining positivity for calculation of sensitivity and specificity of thyroglobulin (Tg) and whole-body scan (WBS) alone. As can be seen in Figure 4 of our paper (*1*), we considered Tg capacity to discriminate between the presence of metastases and the presence of residual thyroid tissue; we calculated WBS capacity to distinguish between patients with metastases or residual thyroid tissue and patients with none of them. We appositely made this difference since a WBS, performed soon after surgery, always allows recognition of a residual thyroid tissue from a lymph node or other metastases, whereas the finding of a high Tg value does not allow this discrimination. Moreover, even if we would have taken in consideration the same criteria, when we calculate sensitivity and specificity considering Tg and/or WBS positivity, we would have found an increase in sensitivity but not a decrease in specificity, because the specificity for WBS alone was 100%.

Thus, the simple formula explained by Dr. Klein can be generally applied unless, as in our study, the specificity or the sensitivity of one of the two parameters alone is 100%.

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1. Ronga G, Fiorentino A, Paserio E, et al. Can iodine-131 whole-body scan be replaced by thyroglobulin measurement in the post-surgical follow-up of differentiated thyroid carcinoma? *J Nucl Med* 1990;31:1766–1771.

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