

quotes have no bearing on the rate-determining step which will only be affected by rate constants.

Mr. Mardell is incorrect in his statement that "obviously, the chelating agent must be present before the pH is raised." Our one-step preparation in which the indium is added to the chelate at a pH of over 7 does form a good brain scanning agent as is evident from our Figs. 2 and 3. It may be that our chelate does contain some acetate as well as the DTPA and is not chemically identical with that formed by conventional means; however, it does have very similar physiological behavior (5).

I feel that our simplified preparation in which a sterile generator is simply eluted into a prepared vial is of great use especially in departments without a radiochemist or a senior biochemist.

Finally, I must take issue with Mr. Mardell's statement that his "liver/spleen agent is clearly not particulate." Duplication of this technique without addition of citric acid produces an acceptable liver/spleen agent. Electron microscopic examination of the preparation shows particulate formation (6). My explanation would be that cations radiolytically released from the column material are also eluted from the generator and that the particles observed are those of insoluble hydroxides or phosphates of these cations with which the indium co-precipitates.

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THYROID CANCER DETECTED AFTER ^{131}I THERAPY

Post hoc sed non propter hoc.

I was rather surprised that the authors of the Case Report on "Thyroid Cancer Detected after ^{131}I Therapy of Hyperthyroidism" (*J. Nucl. Med.* 11:46, 1970) omitted to suggest the most plausible explanation of their findings.

It is not unknown for carcinoma to be detected in hyperthyroidism, and I would be more willing to accept this as an explanation in the case that they report since the time interval is only 4 years.

Table 1 headed "Cases of Thyroid Cancer Developing after ^{131}I Treatment of Hyperthyroidism" should perhaps be more correctly titled: "Cases of Thyroid Cancer Detected after ^{131}I Treatment of Hyperthyroidism."

Whilst one cannot deny the possibility of the association between ^{131}I therapy and carcinoma, I feel that the emphasis placed by the authors on this association is hardly justified.

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THE AUTHOR'S REPLY

We have no objection if one wishes to re-title our paper "Cases of Thyroid Cancer Detected after ^{131}I Treatment of Hyperthyroidism" in place of "Thyroid Cancer following ^{131}I Therapy of Hyperthyroidism." In the body of our paper, we also used the terms ". . . developing after . . ." and ". . . discovered after . . ." Our title and the others imply the same possible relationship of ^{131}I therapy and thyroid cancer. Only further documentation of all such cases will eventually help to substantiate or reject this implication.

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