

## TO THE EDITOR:

We do not wish to engage in a prolonged debate, but it is obvious that our selection of terms has led to some confusion, hence some clarification and amplification of our previous letter seems appropriate.

Our use of "autonomous" for all thyroid glands functionally independent of circulating thyroid hormone levels as demonstrated by nonsuppressibility by the Werner T-3 test has led to misunderstanding by Dr. Spring and undoubtedly others who read our letter. For this we express regrets.

Nevertheless a vast experience with the T-3 test reveals that:

1. Normal patients suppress.
2. Those who do not suppress have abnormal function including:
  - (a) Exophthalmic goiter
    - (1) with clinical hyperthyroidism
    - (2) without clinical hyperthyroidism (not "rare").
  - (b) Autonomous hyperfunctioning nodules
    - (1) with clinical hyperthyroidism
    - (2) without clinical hyperthyroidism (not "rare").
  - (c) Some euthyroid patients with multinodular goiter (not "rare").

It is an advantage that the T-3 test does not suppress uptake in euthyroid patients with abnormal function as above. Otherwise such patients would be indistinguishable, test-wise, from normals.

The KI could suppress a hyperthyroid patient (C.M. Table V) is a serious deficiency. Less serious is the fact that normal patient M.F. (Table IV) did not suppress on KI.

To conclude that one test is superior or inferior on the basis of slight differences in post-suppression uptakes, especially where both tests provide clearly definitive data, is unsound. In our judgment only those cases where the test results lead to different diagnoses are worth analyzing. Of the 36 patients (Tables IV, V, VI) only 8 qualify:

Table IV.

Case I.L. Initially no T-3 suppression. Repeat test inconclusive. Initial uptake too low for meaningful testing.

Case M.F. Clinically euthyroid, suppresses on T-3, not on KI.

Case W.R. Clinically euthyroid, 54 per cent uptake suppressing to 42 per cent on T-3. Hard to accept as normal in spite of KI suppression.

Case A.A. Clinically euthyroid, but uptake 41 per cent suppressing only to 40 per cent on T-3. Who else would accept this as normal thyroid function?

Table V.

Case C.M. Clinically hyperthyroid. No suppression on T-3, does on KI.

Table VI.

Case M.L. Studied three times after therapy. No suppression on T-3 first time. Partial suppression 2nd and 3rd times. KI suppresses clearly all three times. This suggest (to us) that T-3 test more accurately represented what was probably borderline clinical status.

Case A.K. Uptake 38 per cent suppressing to 50 per cent on T-3. Does suppress on KI. Who will accept this as normal function?

Case M.F. Suppresses from 11 to 4 on T-3, but goes from 11 to 27 on KI. What does this mean?

Case E.F. Suppresses from 30 to 20 on T-3, but from 30 to 44 on KI. What does this mean?

In summary where different conclusions could be reached from paired T-3, KI data, to us, acceptance of the T-3 results would appear more reasonable.

Dr. Spring's "euthyroid" patients might simply have uptakes in the "upper range of normal". However to find a representative group of euthyroid patients with a mean uptake of 43 per cent (9 of 22 with uptakes of 45% or more), while a similarly representative group of hyperthyroids had a mean uptake of 53 per cent must be an unique experience.

Simply to be more suppressive than the T-3 test is no advantage. We are aware of no reports that the T-3 test fails to suppress normal patients. Of value might be a suppression test that, while retaining the selective suppressive effects of T-3, does the job more rapidly (and where T-3 might prove hazardous, more safely). It is an advantage (not a disadvantage) that T-3 produces its suppressive effects specifically via the feedback mechanism controlling T.S.H. release. It is the integrity of the feedback mechanism that we wish to test. It is the additional effects of KI directly on the thyroid and the stable iodine pool size which permit it to suppress uptake in hyperthyroids.

Again we appreciate the opportunity to share Dr. Spring's experience. We look forward with anticipation to reading more about his work with the KI test.

VERY TRULY YOURS,  
JOEL I. HAMBURGER, M.D.

### TO THE EDITOR:

Page xvi of this journal's November, 1964 issue prints a *Special Announcement*. Its intentions are somewhat fuzzy, but since the New Era is to start "with this issue" (November) we may take it that Dr. Sears' review, three pages later, gives us a taste of the kind of punishment that the Journal plans to dish out to the rest of us, as it did to Dr. Sears.

If this is the new policy it is a mistake. The needs of a physicist, spelling out a nuclear reaction, are quite different from those of an author who is composing an English sentence. In the latter case there is no necessity for extensive disclosure of nuclear information in condensed form, and the only requirement is to identify the nuclide clearly and with minimum inconvenience. In the interests of clarity you should tell the reader the most important thing first: namely which element you are talking about. Until he knows this, the mass number tells him nothing.

For years most of us have been delivering this information sensibly, and without harassment from superscripts that are a curse to typist, printer, reader and proof-reader alike. Why in the world should we abandon a rational and practical code that puts first things first? Have we become a herd of jelly-bellied me-too-ists, too timid to stand up and think for ourselves? I suggest that to drag nuclear-reaction shorthand out of its appointed place, and plant it in the middle of a sentence, is a clumsy and thoughtless blunder. Somebody—presumably a JNM editor—has made Dr. Sears say "14-Carbon" instead of "carbon-14". Somebody made him say "<sup>60</sup>Co" and "<sup>137</sup>Ce". Somebody wasn't thinking.

No doubt those responsible for this move thought they were keeping up with the times, streamlining the Journal, speeding jet-propelled into the New Atomic Era, or whatever cliché you like. The pitiful truth is precisely the contrary: they hadn't even learned to put the horse before the cart.

There is no need for any of us to pirouette into an anxiety attack if some faddist calls us "old hat". There is no need to hound a competent writer with demands that he keep up with the nucleochemical Joneses. There is no need to ram either domestic or foreign fancies down his throat if they can't be defended under the circumstances that apply. There is a need, however, in this journal as in others, for clear communication, and the threatened policy ignores it. It muddies the water instead of clearing it. It is not being modern, it is turning the clock back.

I have no objection at all to the abandonment of established habits, just so long as the urge to do so comes from the cortex and not the midbrain. I think we should join with the International Union of Applied Chemistry in using their code for those situations where it pays off—for example in nuclear reactions or nuclide-sensitive chemical formulae. But let us steer clear of it wherever it is a drug on the market and something better is already at hand. Within the field of English composition, therefore, I vote emphatically for "cobalt-57", "technetium-99m", and so on. Not "<sup>99</sup><sub>43</sub>technetium<sup>m</sup>", no matter who may think it's jet-age. If we feel the urge to abbreviate, "Co-57" and "Tc-99m" will serve very nicely. You gain