

March 3, 1945

Captain Alfred Z. Gilman,
Chief, Pharmacology Section,
Medical Research Laboratory,
Chemical Warfare Service,
Edgewood Arsenal, Maryland.

Dear Captain Gilman:

I wrote you a letter a few days ago about tetraethyl lead, and the receipt of a copy of Dr. Soroos' letter this morning reminded me of an omission from my letter which I had intended to correct.

What I wanted to do was to call your attention to the fact that intoxication by tetraethyl lead is a very different affair from that produced by inorganic chemical lead compounds. I am responsible for the statement made some years ago and recorded in one of our articles, that the toxicity of tetraethyl lead is to be attributed to its lead content, and that the intoxication induced thereby is in a fundamental sense, lead intoxication. On the other hand, the type of intoxication that is seen in experimental animals and in men is quite different in that it is always an acute intoxication of the Central Nervous System. It is one of the best examples I know of of chemical intoxication with only slight terminal evidences of tissue destruction. For this reason it may be that your experimental findings will have little relationship to the problem of lead poisoning as it is commonly seen in connection with inorganic lead compounds. I am quite sure that this point would have occurred to you without any stimulus from me, but on the other hand, I do feel that it is worth while to mention this point. Needless to say, I shall be very much interested in the outcome of your observations and I hope that I may have the opportunity sometime of learning about them. I can assure you that this is much more than a matter of academic interest, for despite our best efforts, cases of tetraethyl lead poisoning occur from time to time, and when they occur, their outcome is always somewhat dubious.

Sincerely yours,

Robert A. Kehoe, M. D.

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