

June 19, 1937

Dr. John K. Train
1107 Bull Street
Savannah, Georgia

Dear Doctor Train:

Dr. Kitzmiller has called my attention to your letter of June 8th in which you describe the illness of your patient [REDACTED]. There are several things in this picture which make me feel very certain that the condition was not due to lead absorption. At least it seems rather clear to me that this clinical pattern could not have been produced by lead exposure occasioned by the handling of leaded gasoline and the repair of automobiles. In the first place lead poisoning of the severity associated with cerebral symptoms involves massive exposure and considerable lead absorption. Over a number of years in which we have been studying the lead exposure incident to the handling and use of leaded gasoline, we have been unable to find measureable evidences of lead absorption. Thus, even if it were admitted that some absorption takes place, it would seem practically impossible to account for more than the mildest symptoms of a distinctly chronic type. It is utterly impossible, in my opinion, to obtain a sufficient amount of lead absorption through any kind of exposure to leaded gasoline to produce the type of acute cerebral symptoms that are seen in massive exposure either to organic or inorganic lead compounds. Thus I feel quite certain that the exposure attributed to this patient was not adequate to produce the clinical condition which you have described.

From a purely clinical point of view, I have never seen an involvement of the lower extremities as a significant part of the clinical picture of lead poisoning in an adult. This sometimes occurs in children but, in my opinion, the involvement of the lower extremities is almost sufficient in itself to exclude lead as the toxic agent.

Despite the above expression of my opinion, I should be very happy to send you containers for the collection of a small sample of blood and a small spot sample of urine on this patient, if you would like to have lead analyses made. We will be very glad to make the analyses and report our findings to you as evidence for or against there having been significant lead absorption.

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Dr. John Train

In fact, in these cases in which any question of lead has arisen, I am always very glad to have the analytical data. However I await your wishes in the matter before sending containers for the collection of the samples.

The claim of lead exposure from washing automobile parts with Ethyl Gasoline is not entirely a new one. Over a period of years we have seen a number of cases of dermatitis associated with the continual use of gasoline for this purpose, and in several instances the dermatitis has been Blamed onto the lead content of the gasoline. Moreover it is not unusual to find high-test gasoline being used for this purpose. It frequently happens that men obtain gasoline from the nearest source for such cleaning purposes, and if this source happens to have leaded gasoline available, the garage mechanics will take it for this purpose without any objection. Thus to our knowledge there has been a fair use of leaded gasoline for this purpose and yet, so far as we have been able to discover, there have been no cases of anything resembling lead intoxication during the entire period of years over which we have made observations. In quite a number of cases of complaint, we have made prompt analytical studies and in no instance have we been able to demonstrate the presence of abnormal quantities of lead in the blood or excreta. Thus you will see why I am doubtful of the significance of the type of lead exposure here described.

I should appreciate it very much if you would let me know of any further developments in this case and I should also be very grateful to you if you would reply promptly, telling me whether or not you wish me to send sample containers. Obviously this test should be made as soon as possible, if it is to be useful..

It also occurs to me to ask whether or not any examinations have been made of this patient's blood. I am thinking particularly of whether or not there was any anemia and whether or not there were any microscopic blood changes in any way suggestive of lead intoxication.

Cordially yours,

RAK:is

Robert A. Kehoe, M.D.