

April 4, 1942.

Dr. E. J. Eichwald,
Department of Pathology,
St. Elizabeth Hospital,
49 Hopeland Street,
Dayton, Ohio.

Dear Dr. Eichwald:

I am sending you herewith the results of our analyses on the tissues which you forwarded to us some time ago. As you will note in the interpretation written on the report, these results are within the limits found in normal tissues. They, therefore, show no evidence of any significant lead exposure within the period of some months prior to the death of this person.

I should appreciate it very much if you would see that I obtain full information concerning the clinical aspects and the general history of this case. We do not do diagnostic work in general under any conditions, except those associated with our own interest in the problems which we are pursuing in the Laboratory. Accordingly, we attempt to obtain all of the information on any cases in which we are involved, and I trust that you or Dr. Beer can supply the necessary information in this case.

Something is said in your letter concerning X-Ray examinations in search of lead deposits. I think I should point out that this is the phenomenon associated only with the skeleton of children in which shadows are produced in the bones at the point of most rapid growth, as the result, apparently, of localized lead deposits. In the case of the adult, the lead is distributed more throughout the osseous structure, and no appreciable change in the shadows is produced thereby.

Inasmuch as lead, whether in the skeleton or not, is lost from the body, although somewhat slowly after the cessation of exposure, it would be necessary in this case to know when exposure terminated in order to arrive at any definite conclusions based on analytical results. Moreover, any interpretation of the role of lead in the production of this man's anemia, would have to be based on the total clinical picture prior to death, rather than on analyses alone.

Very truly yours,

Robert A. Kehoe, M. D.

A number of human tissue samples submitted for lead analysis by
Dr. Eichwald, St. Elizabeth Hospital, Dayton, Ohio

Analysis Number	Description	Grams	Mg. Pb Found	Mg. Pb/100 Grams
42A-832	Liver	3.6	0.004	0.11
42A-833	Kidneys	4.6	0.0024	0.055
42A-834	Lung	5.6	0.0034	0.060
42A-835	Bone	5.4	0.048-	0.88

Samples Received: 3-30-42

Samples Reported: 4-2-42

The lead concentrations in these tissues are within the limits observed in normal tissues. These results indicate that there had been no significant lead exposure within a period of months prior to death.

Robert A. Kehoe, M. D., Director,
Kettering Laboratory of Applied
Physiology