

October 26, 1931

Dr. A. R. Riddell,
Division of Industrial Hygiene,
Department of Health,
Toronto, Ontario.

Dear Dr. Riddell:

Allow me to thank you for your courtesy in sending me a copy of your article "Laboratory Aids in the Diagnosis of Lead Poisoning". I have found your discussion very interesting, and for the most part complete.

There are two points in it on which I could wish that the information were a little either more specific or less specific. I refer to the significance of stippling and to the significance of the finding of lead in the urine and faeces. I believe that these are the most difficult data to interpret in arriving at a conclusion as to the status of a case of suspected lead poisoning. On one hand, some quantity of stippling is of common occurrence in a variety of conditions other than lead poisoning. On the other hand, I do not believe that lead intoxication occurs as result of prolonged exposure, without the development of stippling. I regard the presence of stippling, therefore, as necessary in arriving at a diagnosis if the case is studied at or near the onset of symptoms. However, I believe we must be very cautious about establishing or attempting to establish any quantitative figure as being significant of lead intoxication. One must know a great deal about the history of the case in order to make proper interpretation of this information. However, I consider the stippling as the most significant factor in the blood changes, especially so since stippling, in my experience, is the first demonstrable change in the blood in lead intoxication.

In the matter of analytical work, we have again the same difficulty. The lead excretion of a normal individual is rather variable, and it is usually necessary to study the patient for some time before one can make accurate interpretation of the significance of the lead excretion, except in those cases in which there has been a very large lead absorption. In these cases, usually, this fact is so readily demonstrable by other methods, as scarcely to be needed, whereas in the doubtful cases the information obtained by analyses must be treated with special care. Except where this is done I believe that the value of analytical methods

in studying the urine and faeces, are likely to be very much over-estimated. I base this conclusion on careful study of a large number of cases of lead absorption in the lead industries, as well as lead absorption in the normal unindustrialized population.

I am making these unsolicited comments, not in the spirit of controversy, but rather with the attitude of one who having done a very large amount of work on this particular subject, is convinced that there is still very much more to be done before we have an adequate basis on which to accurately evaluate the laboratory aids in the diagnosis of lead poisoning.

Again thanking you for your courtesy in sending me the article, I am

Very cordially yours,

RAK:ET