August 23, 1954

Dr. James Garrison
Chief Resident, Pediatrics
Louisville General Hospital
323 E. Chestnut Street
Louisville 2, Kentucky

Dear Doctor Garrison:

I hasten to reply to your letter of August 20th, despite a flood of other work to be done, because of your concern and that of Doctors Steigman and Little for the situation of your small patient. This should demonstrate to you that my comments concerning our fulfillment of your (and their) wishes are not made in a carpingly critical or uncooperative spirit.

We are entirely willing to help our medical friends and colleagues in matters of diagnosis and treatment when we can do so. Unfortunately we cannot help them in research work without abandoning our own. It appears that there is no question of diagnosis in the case to which you refer. If that is the case you do not need any analytical work. The effects of the use of Calcium Disodium Versenate on the excretion of lead are entirely predictable, on the basis of ample observations in a number of hospitals and laboratories, and no useful purpose will be served by further work of this type unless it is designed and carried out carefully to demonstrate the nature of the mechanisms and the indirect physiologic effects.

There is a problem of therapy on which we will help you. A course of treatment with "Versene" removes a considerable proportion of the lead available in the soft tissues, but apparently has little immediate influence on that in the skeleton. Subsequently, the equilibrium between the bones and soft tissues is restored, and if there is a sufficient amount of lead available, the lead concentration in the soft tissues may reach dangerous levels some time after the therapy has come to an end. It seems probable, therefore, that the therapy can best combat this situation if it is intermittent. In general, two periods of five or six days of therapy with an interval of a week, more or less, are employed. We have seen several cases here in which it seemed wise to repeat the procedure after an interval of some weeks. I suggest that you might wish to give the "Versene" as I have indicated, and then two weeks or so after the last dose, obtain blood and urine in our containers and by our instructions, to see if the level in the blood is within safe limits. If it is not we can advise you, and you might wish to resume therapy.

It is not certain that even this intermittent therapy is safe if prolonged, but if the quantities of lead in the body warrant it, it seems wise to take the chance in view of the dangerous character of this disease in children.

Let me also point out that there is no point in obtaining samples during the period of "Versene" therapy, except for investigative purposes, since the extent of the response to the therapy cannot be used to gain even an approximately correct idea of the quantities of lead that have been absorbed, unless one collects all of the urine and preferably also all of the feces, during the entire period of therapy. There is, therefore, no diagnostic or prognostic virtue in such analytical results. The only means we have of determining the probable quantities of lead in the intact human body and their significance for hygienic or diagnostic purpose, is that of obtaining appropriate samples of blood and urine without inducing any change of any kind in the pattern of distribution of the lead in the body. The use of B.A.L. or Versene in therapy completely upsets the picture and makes any interpretation of the situation completely impossible. Your diagnostic sampling, therefore, should have been done before beginning the therapy.

The charges for analytical services in this Laboratory (primarily a research laboratory) are merely to reimburse us for the actual cost to us of the work, so as not to misuse funds earmarked for specific items of research. If a patient cannot afford these charges, they are waived on the recommendation of the doctor. This cost is $10.00 per analysis (except that we obtain duplicate samples of blood and charge as for one) for blood and urine. A single diagnostic effort involving the analysis of duplicate samples of blood and one (spot) sample of urine, costs $20.00. You will understand, I believe, why numbers of analyses are not justified, except for highly essential purposes of specific research.

I will send the necessary containers and instructions when I hear further from you, if you wish to follow my suggestion.

Cordially yours,

RAK:vr

Robert A. Kehoe, M.D.