BBOTT RESEARCH LABORATORIES

LABORATORIES • NORTH CHICAGO, ILLINOIS

ment of Pharmacology

ARD K. RICHARDS, M.D., F.A.C.P.

February 16, 1949

Robert A. Kehoe, M.D.
University of Cincinnati
College of Medicine
Cincinnati 19, Ohio

Dear Dr. Kehoe:

This is to acknowledge with much thanks your letter of February 5th and the reprints which arrived just today. I am indeed much obliged to you for the time and effort you took to explain your present viewpoint on lead poisoning, and I am very happy to have the copies of the valuable publication which I am sure will greatly help me in my particular problem.

I noticed with special interest the change in attitude regarding deleading. I have always been puzzled about the rather vacillating reports in the literature, with some people favoring and some relegating such a procedure.

I hope that within the next few months I will find a chance to write up a rough draft of a recommended treatment for the book on therapy to which I have been asked to contribute. I would consider it a privilege to send you this outline with the hope that you will criticize it and correct if you find it materially wrong.

Thank you again for your kindness and cooperation.

Sincerely yours,

R. K. Richards, M.D.
Director of Pharmacologic Research

RKR:an

February 5, 1949

Dr. R. K. Richards,
Director of Pharmacologic Research,
The Abbott Research Laboratories,
North Chicago, Illinois.

Dear Doctor Richards:

I fear I am tardy in replying to your letter of January 18, but at least I have nearly caught up with an accumulation of correspondence which came in during or shortly after a brief holiday vacation.

In response to your request I am sending you under separate cover a series of reprints, and one official report of the American Public Health Association. I commend the latter report to your attention, for even a certain sense of modesty does not deter me from saying that it is much the best publication available in the English, or any other language, on this subject. Within it you will find a rather large number of references which have been classified to a certain extent. You will find a limited number of references to the treatment of lead poisoning. There is only one additional bit of information that I would add on the problem of therapy, to that which is given in this report. Since this report was prepared, experimental observations of a very critical type have been carried out in a rather large series of cases of lead poisoning which came to our attention fortuitously. I am now prepared to say without any qualification, that there is no point in even talking about "deleading." The idea as originally advanced by Aub and his associates was a very interesting one, and from the physiological point of view very intriguing and satisfying. Unfortunately, there is nothing in it. Our observations over a period of years have shown clearly that the lead and calcium metabolism do not go along hand in hand, but, we think, diverge decidedly under suitable circumstances. Retention of lead in the skeleton is not influenced materially by the absorption of large quantities of calcium over considerable periods of time, while the elimination of calcium from the body does not materially influence the loss of lead from the skeleton. The efforts made to influence the calcium metabolism are, therefore, without effect on the elimination of lead.

The influence of the administration of BAL is quite another thing. This agent brings about a very prompt release of lead from the erythrocytes, and permits a very high level of urinary excretion of lead. Over a period of some hours the response is highly dramatic, and from the physiological point of view this is a most interesting phenomenon. Here again, however, unfortunately the total effect is that of the elimination of a few milligrams of lead over a short period of time, and since this therapy cannot be maintained long enough to remove any considerable proportion of the lead from the body, it is unimportant therapeutically. Some means may be found for using this principle in either the prophylaxis or therapy,

providing a less toxic compound such as BAL glucocide can be shown to exert its effect over a longer period of time. At present, however, this is merely a hope. We expect to investigate it when the opportunity presents itself. The influence of BAL on the clinical symptomatology of lead poisoning, in our experience, is wholly negligible. Since we have treated about twenty cases by this means, we are quite prepared to say at this point that results of such therapy are of scientific interest and are of no special value to the patient.

In short, except for the treatment of symptoms as they arise there is no useful therapy for lead poisoning beyond the complete interruption of lead exposure. I might say in addition that lead poisoning is essentially a self limited clinical syndrome. Except for rare instances of irreversible damage to some part of the nervous system, the cure of the disease is spontaneous and complete. The outcome is influenced very little on a time base or otherwise by any known therapeutic procedure.

Cordially yours,

Robert A. Kehoe, M. D.

RAK ef

Reprints under separate cover.

A B B
OTT LA
Department of Pharmacol
RICHARD K. RICHARDS, M.D., F.A

glucocide can be s.
time. At present,
to investigate it when
ience of BAL on the
in our experience, is
about twenty cases by
t this point that results
t and are of no special

mptoms as they arise there
beyond the complete
addition that lead
n addition. Except

partment of Pharmacology
RICHARD K. RICHARDS, M.D., F.A.C.P.

ABBOTT RESEARCH LABORATORIES
T LABORATORIES • NORTH CHICAGO, ILLINOIS

January 18, 1949

Kettering Laboratory of
Applied Physiology
College of Medicine
University of Cincinnati
Cincinnati, Ohio

Gentlemen:

I am in the process of reviewing the field of lead poisoning in order to edit a chapter for a new textbook on therapy.

I am aware of the excellent work which has been done in your institution by Dr. Kehoe and other members of the staff on this subject and would appreciate any recent reprints or references on the treatment of acute and chronic lead poisoning which you may have available.

Any assistance you can give me in this respect will be most gratefully received.

Very truly yours,

R. K. Richards, M.D.
Director of Pharmacologic Research

RKR:an

Call attention to APHA report as source of info & bibliography
Point out there is no very useful therapy of
a specific type as [illegible]

N 6208.02