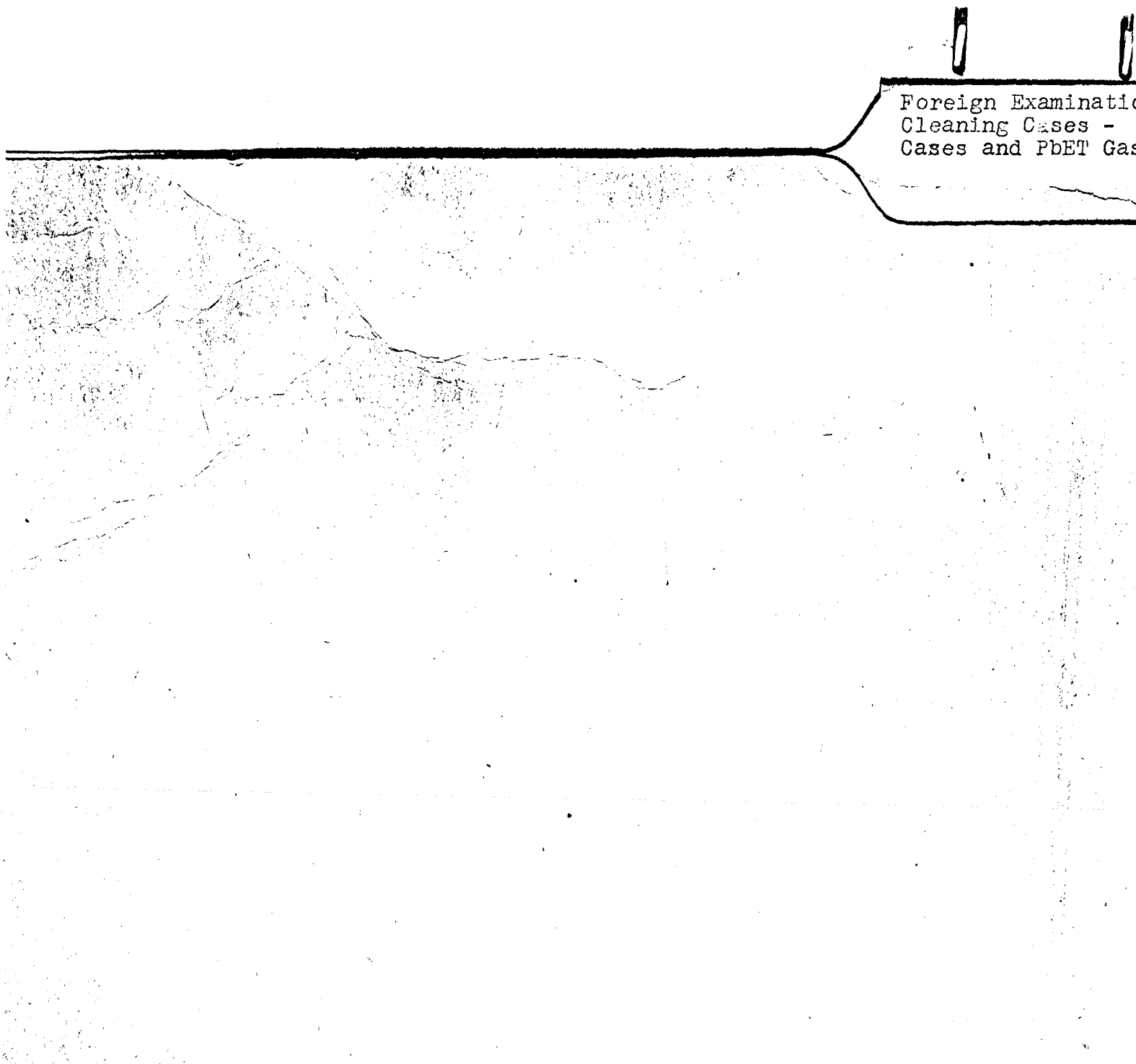
Foreign Examinati
Cleaning Cases -
Cases and PbET Gas

Tetraethyl Lead
Australia

September 17, 1947

Dr. Keith D. Fairley,
31 Collins Street,
Melbourne, C.I.,
Australia.

Dear Dr. Fairley:

It has been some time since we have corresponded, and I am glad to resume where we left off last time. The specific occasion for this letter arises from the correspondence which I have received recently in connection with two cases of tetraethyl lead poisoning treated by Dr. Blackburn and reported in some detail. The correspondence also contains a copy of your letter of July 22 to Mr. Batchelor. It seems wise in view of this whole situation to give you our reaction to the conclusions, arrived at more or less tentatively, concerning the efficacy of BAL in the treatment of tetraethyl lead poisoning. I am told that Dr. Blackburn is to be in this country and that I shall probably have an opportunity to discuss this matter with him in person. Meanwhile, I think you should have our opinion.

I have gone over the case records on the two men as far as they are available, and I am frank to say that I find nothing in the record that would give me any great assurance that the therapeutic use of BAL had materially influenced the outcome of these cases. Their courses were in no wise to be regarded as unusual in our experience. These cases always have their ups and downs, and in a number of instances their recovery has been such as to give one the feeling that they had virtually been snatched from the grave. A number of men have survived when one would have expected them to die, and others have died when they were expected to survive. These vagaries in the development and course of a disease are, therefore, characteristic of the disease and not of its treatment. I do not mean to say that treatment has not been useful. I feel quite certain that a number of men are alive by virtue of the judicious use of barbiturates particularly, plus adequate supportive treatment. However, I see no evidence at present that there is any dramatically successful or specific treatment. The cases of Dr. Blackburn are no exception.

There are a number of good experimental reasons for doubting the usefulness of BAL in this condition. Experimental work done by Gilman in this country when he was with the Chemical Warfare Service, have been reported to me informally. They seem to have demonstrated clearly that BAL does not save the lives of animals given a lethal dose of tetraethyl lead, whether the latter is administered before or after the intoxication has developed. Other experimental work, referred to in an article of ours in SCIENCE, of which I am sending you

reprints, has demonstrated that the toxicity of the lead-BAL complex is greater than that of either of the

reprints, has demonstrated that the toxicity of the lead-BAL complex is greater than that of either of the components separately. All of the evidence seems to indicate, that while BAL is extremely useful in arsenic and mercury poisoning, it is valueless in lead poisoning. Our own observations speak for themselves with reference to the effects of BAL on lead metabolism. They give us no reason for believing that BAL controls or decreases the symptomatology due to lead absorption. We have a hope, which we are undertaking to investigate, that the BAL glucocide, which has low toxicity, may be employed frequently over some period of time to eliminate lead from the body with considerable rapidity. If this is feasible, it might turn out to be very useful in dealing with certain types of men unduly exposed to lead in their occupations. However, even this type of therapy would have to be used carefully, after thorough-going investigation, lest the rapid release of lead from the erythrocytes of the blood should result in a maintained elevation of the lead in the plasma, thereby causing injury to susceptible tissues. On the whole I consider that this is a matter in which we should go slowly, being very careful not to encourage the use of BAL in cases of this type, except under the most carefully controlled conditions. I am frank to say that I should hesitate very much to use BAL in the case of tetraethyl lead poisoning unless I had reason to feel that the chances for the survival of the patient were negligible.

I have pointed this out to our people in London, since I have felt that they should avoid communicating to anyone the impression that we have demonstrated an adequate method for the treatment of this type of poisoning.

I should be glad to hear from you on any account, and especially if you care to comment on my remarks.

With kindest personal regards,

Sincerely yours,

Robert A. Kehoe, M. D.

RAK ef

Copy by air mail.
Original by steamer.