

April 26, 1940

Dr. A. A. Fink
General Hospital
Department of Pathology
Cincinnati, Ohio

Dear Doctor Fink:

I am sending you herewith a report of the analyses on the tissues of Fred Wehr. These results are not abnormally high and reveal no evidence of recent significant lead exposure.

I think it is worth while in connection with this case to point out that good medico-legal practice with reference to suspected cases of metal poisoning requires the analysis of samples of all of the representative tissues for the two-fold purpose of determining the pattern of the distribution of the metal in the tissues, and for enabling the approximate total quantity of the metal in the body to be calculated. With this idea in mind, we have prepared a form which will provide briefly certain significant facts and which lists the organs which are desired for analysis in cases of this type.

For our own information, for scientific purposes, as well as for medico-legal considerations, we should like to have as many of these tissues in each case which comes to our attention as circumstances will permit. We realize, of course, that it is not always possible to obtain all of these tissues, but it is much better to obtain them at an autopsy than to have to resort to exhumation to fill in the information which might be required to establish the facts.

The above suggestions apply principally, of course, to the metals and metalloids, such as arsenic. It is not true of such things as phosphorus, organic solvents, alkaloids and narcotic poisonings. As you are probably well aware, the requirements in the particular situation depend upon the nature of the suspected fatal poisoning. It is not feasible, therefore, to list the requirements in precise detail. In general, therefore, it would be desirable to supply tissues as completely as possible and in as large quantities as is feasible. Several hundred grams of liver should be supplied in every instance, as much of the kidneys as are available, a large portion of the brain, when feasible, a piece of muscle weighing at least 100 grams, and pieces of bone, so far as they can be obtained. There are

physiologic differences between long and flat bone and, therefore, we would like to have both, if possible. Since this is not possible, in many instances, we believe that our joint interests would be best served by providing pieces of a portion of rib since this can be done without mutilation. In most instances, a few grams of any organ are useless, and if an adequate quantity of each tissue is supplied, we can arrange the samples for analysis in such a way that we can get all of the information which is required. Otherwise we have to come to some decision as to what to do and what to omit, and in this way the facts in the case may be left in doubt.

With these ideas in mind, I am sending you a sheaf of our forms to be held in the office and to be used as required. I would appreciate it if you would call the attention of your associates to the points which I have made in this letter, and, perhaps, you will wish to place in this folder a brief request to the effect that all of the tissues indicated on the sheet should be obtained, so far as possible, when toxicologic studies are to be made.

Cordially yours,

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Robert A. Kehoe, M.D.

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