

September 8, 1939

Dr. Sidney McCurdy
Supervisor, Medical Section
Industrial Commission of Ohio
Columbus, Ohio

Dear Doctor McCurdy:-

I send you herewith somewhat tardily report of our examination of [REDACTED]. This report was delayed by reason of my absence from the city on a brief vacation. The analytical results obtained after examination had been completed were not in keeping with the history and the physical findings, as will be noted in the report. For this reason my associates considered it unwise to forward the report until I had returned to examine them and to attempt to explain them.

Concerning these analytical reports, I may say that if they had not been done in this laboratory and if they had not been checked by two sets of samples, I would be exceedingly skeptical of their accuracy. As the report indicates, we have never found bona fide results of the sort shown in this man's urine except under conditions of acute exposure, and although I am not justified in jumping to conclusions, I can not but suspect that some very unusual type of lead intake occurred in the case of this man shortly before he appeared here for examination. In some hundreds of cases of occupational lead exposure which have been studied by us over a period of years, we have never seen figures of this order of magnitude even after a lapse of a few weeks after the cessation of exposure. It is simply not reasonable nor sensible to attribute these high results to a moderate lead exposure which had been discontinued two years previous. Therefore I am led to feel that either there is some unusual environmental factor in this case at present or else we have been subjected to some intentional deception. Obviously one does not arrive at the latter conclusion on such evidence. It is, therefore, my feeling that this man should be studied further in order to determine what has occurred in his case. I have not felt that I was justified in sending for him for any further study since such a study could not be carried out adequately without putting the claimant in a hospital where he could be kept under close observation and where his lead intake and output could be studied over a short period.

I think it is also worth mentioning in connection with the report on Mr. [REDACTED] that in an interval between two sets of examinations while he was in Cincinnati, he made a little tour of the city, from which he returned somewhat flushed of face, decidedly loquacious and smelling strongly of alcoholic beverages, the imbibition of which he stoutly denied. It will be noted in this connection that he describes himself as very nearly a total abstainer in his history. In the interests of fairness, we have not stressed the point of alcoholism in our report. There is, however, no question that alcoholism has played a role in this man's physical state.

I send herewith our fee bill for our services, and we shall await your further instructions if it is considered desirable to make any more observations on this claimant.

Very truly yours,

RAK:is

Robert A. Kehoe, M.D.

RA 0016892

O.D. 12816

9-8-1939

For examination, diagnosis and recommendations
in the case of [REDACTED] - O.D. 12816

Complete physical examination, consisting of
physical examination, microscopic blood examina-
tion, (red, white and differential counts,
hemoglobin determination, count of stippled
erythrocytes), clinical urinalysis, microscopic
examination of urine, and analyses (5) on blood,
urine and feces for their lead content.. . . .

\$45 00

\$45 00

KE 8689100
0016893

N19493.01

[REDACTED]

Ohio Industrial Commission Case. Sample of blood
received November 2, 1939.

Blood

Analysis No. 39A-3907

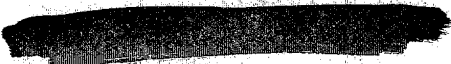
Grams - 4.1

Mgs Pb/100 gms - 0.075

Reported: November 7, 1939

KE 0016894

N19493.02


Ohio Industrial Commission Case. Blood sample #4 received
November 4, 1939.

Blood

Analysis No. 39A-3944

Grams - 21.8

Mgs Pb/100 gms- 0.08 (Spectrographic)

Mgs Pb/100 gms- 0.07 (Dithizone)

Reported: November 13, 1939

KE 0016895

N19493.03

Report of Clinical Investigation on- [REDACTED]

Claim No. C.D. 12816

Address: 1776 E. 93rd Street, Cleveland, Ohio - Age: 52

Date of Examination and Study October 30, 1939 to Nov. 6, 1939.

(See previous report dated August 15, 1939).

Claimant reported to Cincinnati on October 30, 1939. Was seen and samples of blood and urine were taken, after which he was admitted to Deaconess Hospital, Clifton Avenue, Cincinnati, Ohio. The collection of further samples of excreta, as indicated hereafter, was begun at 6:00 P.M. October 30th.

Interval History

Since August 1939, when last examined, has not been better or worse. Has had no acute illness but has felt unable to work. Has had occasional moderately severe abdominal cramps with diarrhea. No true colic or other manifestations of plumbism.

On Saturday, October 28th, following unusual exposure to cold, developed severe pain in right shoulder which has continued steadily since. Pain is limited to neighborhood of joint and has been so severe as to prevent voluntary movement of shoulders.

Physical Examination

General physical condition is essentially unchanged except for disability of right shoulder. Anterior and posterior chest excursions are possible without marked pain, the disability being most marked in abduction. There are no sensory disturbances in the arms or hands, and the muscular strength of forearm and wrist is good. Pain does not prevent sleep and when shoulder was supported by sling, the symptoms relented sufficiently in 2 days to permit shaving. The lesion is believed to be sub-acromial bursitis. The faint punctate deposit in the left lower molar region is unchanged and there is some marginal discoloration of the gums particularly on the lingual aspect of the lower incisors, which, however, does not appear to be a lead line. Discontinuance of tooth-brushing and oral hygiene for 4 days caused no noticeable change in the deposits.

The X-ray examination (report attached) revealed a slight increase in peribronchial markings but no more so than might be anticipated at the patient's age. This examination was requested in order to determine whether or not the industrial lead exposure in 1935 might have been associated with considerable exposure to siliceous dusts containing lead which, it was tentatively believed, could have been retained as deposits in the lungs to be subsequently released over a long period of time into the blood and lymph streams. The x-rays do not suggest that such deposits exist.

KE 0016896

N19493.04

Laboratory

Hb 11 gm

Coagulation time 2-1/2 minutes

WBC 3,600,000

Stippling - none

WBC 12,150

Other laboratory findings were essentially negative except for the results of analyses for lead, which are shown separately.

Poly 53

Lymph. 40

Monon. 2

Neut. 5

Hospital Regimen

While in the hospital patient was abed with toilet privileges, all clothing was provided by the hospital and medication was limited to that prescribed by us. Every stool passed was collected as an individual sample and all urine voided during the week of observation was collected in 24-hour samples, from 6:00 P.M. to 6:00 P.M.

Analytical Data

<u>Date Obtained</u>	<u>Nature of Sample</u>	<u>Volume or Weight</u>	<u>Lead in Milligrams</u>
Oct. 30th, 1939	Blood	10 cc	0.075 per 100 grams
Nov. 2	"	" "	0.075 " " "
Nov. 4	"	" "	0.075 " " "
Oct. 30th	Urine	100 cc	0.22 per liter
Oct. 30 6:00 P.M.)	"	1470 cc	0.24 " "
to			
Oct. 31 6:00 P.M.)			
Oct. 31 - Nov. 1	"	1300 cc	0.20 " "
Nov. 1 - Nov. 2	"	1130 cc	0.35 " "
Nov. 2 - Nov. 3	"	1130 cc	0.24 " "
Nov. 3 - Nov. 4	"	1070 cc	0.26 " "
Nov. 4 - Nov. 5	"	1500 cc	0.21 " "
Nov. 5 - Nov. 6	"	1420	0.19 " "
Oct. 31, 10:00 AM	Feces(dried)	4.2 grams	0.18 in entire sample
Nov. 1, 9:15 AM	" "	30.3 grams	25.00 " " "
Nov. 2, 1:30 PM	" "	13.5 grams	0.60 " " "
Nov. 3	" "	11.7	0.52 " " "
Nov. 4	" "	7.3	0.24 " " "
Nov. 5	" "	22.1	0.53 " " "
Nov. 6	" "	13.6	0.38 " " "

The lead concentration in the blood samples is consistently and uniformly above the normal and is indicative of some recent and continued lead exposure, since it does not diminish during the period of the observations. That is, it is not due to a single

KE 0016897

high dose of ingested lead during the few days immediately preceding the examination. This conclusion is verified by the urinary values which show the same maintained elevation. The fecal samples, on the other hand, reveal a large amount of lead in one sample, which is obviously the result of the ingestion of an unusual quantity of lead not longer than 72 hours preceding the examination. The very small sample of feces available on the first day of the observations was not a normal or representative evacuation, but it also was high in its lead content, having some 4 to 5 times the lead concentration of normal feces. The subsequent fecal samples fall off in their lead content in a manner which would be expected in a new and lead-free (within normal limits) environment. It is quite apparent that Mr. Stadler came to us directly from an environmental situation in which he has been ingesting large quantities of lead periodically for some time. In no other way could such quantities of lead occur in the blood, urine and feces during our repeated observations. We consider it probable that this intake of lead, so unusual under the conditions of ordinary life, is self-induced, with or without the assistance of others, but in any case, these present findings have no relationship to an occupational lead exposure which ended four years ago, but arise from a source of exposure which exists at the present time.

Conclusions.

With the exception of the temporary disability associated with the buritis, we find no evidence of incapacitation or disability that would disqualify this claimant from doing work suitable for a man of his physique and age. The source of his present lead intake, which has the effect of maintaining abnormally high levels of lead concentration in his blood and excreta, is a matter of considerable interest, but is unrelated to his former industrial lead exposure.

Signed:

Robert A. Kehoe, M.D.
Kettering Laboratory of
Applied Physiology
University of Cincinnati
Cincinnati, Ohio