Lead Industries Association

420 LEXINGTON AVENUE

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DIRECTOR OF HEALTH AND SAFETY

May 19, 1955

Robert A. Kehoe, M. D.
Director
Kettering Laboratory of Applied Physiology
University of Cincinnati
College of Medicine
Eden Avenue
Cincinnati 19, Ohio

Dear Bob:

With Dr. Byers' permission, I am sending you herewith copies of several letters dealing with a case of lead poisoning in a Chinese infant, the source of which is thus far obscure. I am sending copies also to Drs. Chisolm and Harrison in Baltimore, Dr. Mellins in Chicago and Dr. Smith in Cincinnati, my hope being that this little distribution to some of those experienced in this field may bring forth suggestions as to further clues which may be run down.

I think you will agree that we have here a challenge meriting consideration and effort even beyond the very material quotas already accorded it, and I hope you will give it careful consideration to that end.

Sincerely,

MB:MM

COPY

May 17, 1955

Dr. Clarence Maloof
A. C. Lawrence Leather Co.
Peabody, Mass.

Dear Dr. Maloof:

I am still agitating the case of [redacted]

There seems to be very little doubt that this five-months baby has lead poisoning. There seems also to be very little doubt that Mrs. [redacted] has rather more lead in her blood and urine than is reasonable. There is also one sample, as you know, which showed that the mother's breast milk contained no lead. The father is free of lead as far as we can tell. As you know, samples of paint and plaster have showed a small amount of 0.6% in the plaster from the bedroom ceiling, but as I understand it this plaster was not peeling very much, and how a baby of three months could obtain it, is clearly beyond me.

I talked with a couple of Chinese public health students, asking whether they knew of any method by which the baby might have gotten lead in relation to some sort of Chinese medicine, but they did not seem to have any ideas. It seems inconceivable to me that the source of lead can't be somewhere very close to this baby, but I cannot think of any other methods of demonstrating it. I wonder if you have further notions as to anything which might be done to elucidate this problem further.

Sincerely yours,

/s/ Randolph K. Byers

Randolph K. Byers, M. D.

C O P Y

RANDOLPH K. BYERS, M. D.

The Children's Medical Center
300 Longwood Avenue
Boston

May 5, 1955

Mr. Manfred Bowditch
Lead Industries Association
420 Lexington Avenue
New York 17, N. Y.

Re: Helen Chin

Dear Manfred:

I think we have given the [redacted] family the works. We have found very little in the way of understanding the source of the child's lead poisoning.

In the first place we have now had 19 different lead determinations done by the laboratory at the M.G.H. This has included 7 different determinations on the baby's urine on and off Versene. Each time she goes on Versene the values of the lead rise to 3000 micrograms and things of that sort. The mother's urinary output of lead per twenty-four hours is elevated, being about 120 micrograms per twenty-four hours. The father's urinary lead output is quite normal. There are no coproporphyrins in either parent's urine. The blood lead on the father is within normal limits. The blood lead on the mother is in the high normal range.

Paint flakes from the kitchen ceiling show no evidence of lead. The plaster from the ceiling of the bedroom, which was crumbling a little bit but not very extensively, shows a layer of paint which contains 6/10 of 1% lead. How a significant amount of this could get into a 5-months baby I do not know. The flakes from this latter ceiling were certainly not very numerous. Samples of the hot and cold water have shown no lead whatever. The mother grew up on a farm in China where water was from a dug well. We have no way of testing this. She has been in this country for 2½ years and has not been employed in any industrial enterprise here nor has she done any painting or any other things which might have given her lead poisoning. It seems to me that the evidence that she has been somewhere exposed to lead is incontrovertible, but I am afraid I can't find out where it is. Whether the lead got into the baby through her milk is something that we will never know. The only one sample that we got was totally negative for lead.

Since the family is completely indigent, I have spent money from the lead fund for all of these analyses which come to about $190. I wish we had something more concrete to show for it.

Sincerely yours,

/s/ Randy

Randolph K. Byers, M. D.

COPY

RANDOLPH K. BYERS, M. D.

The Children's Medical Center
300 Longwood Avenue
Boston

April 21, 1955

Mr. Manfred Bowditch
Lead Industries Association
420 Lexington Avenue
New York 17, N. Y.

Re: [redacted]

Dear Manfred:

Since Dr. Maloof reported we have been fussing around with the [redacted] child. She improved quite strikingly on Versene and is now at home again. We have samples of the mother's breast milk which were totally negative for lead by spectroscopic examination and other methods. The father's urine also shows a very faint trace of lead. One spot specimen of urine from the mother shows a fairly large amount of lead, and since the analysis is over on the ward, I have not got the exact figure with me, but it certainly is high enough to warrant further investigation. The mother is now collecting a twenty-four hour sample which we will submit again for analysis.

So far, we have gotten no hints as to where the lead might come from, and I have taken the matter up with a Chinese doctor who is working in the School of Public Health, and he was unable also to get any hints out of the mother or out of his own recollection as to things that might have been done to this baby to give her lead poisoning. The mother did live in the Orient for a considerable period, and it is possible that in the past she had used lead-containing face powder. It might be that her milk contains lead sometimes and not at others, but since she lost her milk owing to the baby's illness, I am afraid we won't be able to go into this aspect of the matter any more. A couple of spot samples of urine from the mother have been also negative for coproporphyrins.

Sincerely yours,

/s/ Randy

Randolph K. Byers, M. D.

COPY

March 30, 1955.

Dr. Randolph K. Byers
Children's Medical Center
300 Longwood Ave.
Boston, Mass.

Ref.: [redacted]
15 Kirkland St.
Boston, Mass.

Dear Dr. Byers:

As Dr. John Whitcomb probably told you, he, one of his colleagues, and I visited the home of the [redacted] Baby and the parents, Mr. and Mrs. [redacted], were interviewed.

There was an extreme language difficulty in this case, in that Mrs. [redacted] neither speaks nor understands English and Mr. [redacted] does so, poorly.

Their little daughter - five months old - has been hospitalized at the Children's Medical Center for the past several weeks, with the diagnosis of cerebral hemorrhage and lead encephalopathy. Lead has been found in her urine and she has improved slightly under Versene therapy. We tried unsuccessfully to determine where this child was obtaining the lead.

As she is only five months old, the parents informed us that she is still being breast fed and the only other source of food was fresh, squeezed orange juice. They vigorously deny any history of pica or oral ingestion of any substance other than mother's milk and fresh orange juice. She was apparently well up until several weeks ago, at which time she developed an upper respiratory infection and signs of cerebral pressure. She was taken to the Outpatient Dept. in the Medical Center on several occasions before hospital admission.

The [redacted] live in a three-room cold water flat in a very old house - approximately fifty years old. The plumbing, however, is all brass. The paint on the walls appears to be of the water base type and is not flaking or in poor condition. The ceilings, however, were in very poor shape and there was an abundance of paint flakes on them. Samples of these paint flakes were taken from the child's bedroom and kitchen and have already been taken to the Children's Hospital.

The flat is heated by a gas space heater in the living room. This appears to be a new space heater - made by Sears-Roebuck - and it seemed to be in good running order. Mr. [redacted] did inform us that on very cold days it was his custom to place an aluminum pie plate over one of the gas burners on the kitchen stove, so that the flame might be dissipated and the house heated more readily. He stated that when he first put this plate over the flame a light smoke was emitted, but this emission soon stopped after the plate became red hot. As you know, this plate has already been submitted to the hospital and the manufacturers contacted. They assured Dr. Whitcomb that the plate was primarily aluminum and there were no lead impurities in the composition of the plate.

When questioned, Mr. Chin [redacted] that his wife might have used a lead nursing shield or any other medication on her breast. They denied giving the child any old Chinese remedies or burning any substances in the house to alleviate the symptoms of her cold.

On questioning, Mr. [redacted] denied that the child had ever been taken on visiting trips where she might have come in contact with any foreign substances and that, to his knowledge, she never ingested anything but the mother's milk, orange juice and some antibiotic remedies prescribed by a local physician, Dr. Dyer. He further stated that the child had no toys whatsoever, not even a rattle or a crib gym. to play with. The child's crib is a Thayer's and of high quality. It was stained and not painted.

At about this time we became quite desperate and even inquired if Mr. [redacted] had been spraying or putting around any powder to eradicate any household pests. This was likewise denied. Mr. [redacted] added that the child could not have come in contact with any foreign material because she was never allowed on the floor.

In summary, this investigation did not give us any leads as to the origin of the lead intake. The father vigorously denies any possible source. Possibly he denies this too vigorously.

The only suggestion I might have is that the urine of both parents be obtained and analyzed for lead. If lead above the normal level is found, then we will know that the source is a common one both to the parents and the child. If neither parent shows any abnormal lead excretion, then we might have to fall back on the supposition that the child has ingested lead from some source which at present is being hidden from us. It might be possible that some Chinese remedy has been given to this child for her upper respiratory infection and that the father does not wish to reveal this information. This, however, is just a pure guess. It is my understanding that the pie plate has been ground and is going to be analyzed for lead.

I am sorry I could not be of more help to you but this case has now turned into quite a mystery and I would be most interested in finding out the final outcome.

If I can do anything more in regard to this case, please let me know.

Sincerely,

/s/ Clarence C. Maloof