

American Medical Association

KE 0015042

N21153

Editorial Department
Journal American Medical Association
535 North Dearborn Street
Chicago, Illinois

Attention: M.P.

Gentlemen:-

I have no wish to urge further consideration of the paper "Unusual Causes of Lead Poisoning" by Nell Conway of this laboratory, which was returned as unacceptable, and I do not presume to criticize your editorial judgment, which must be based on certain necessary limitations of space, as well as other factors. There are, however, certain points in the letter which accompanied the returned manuscript with which I must take issue, since they reveal the existence of a misunderstanding of certain aspects of the problem of exposure to small quantities of lead which is likely to have unfortunate and embarrassing consequences.

Let me say, as I should not have to do, by way of justifying the somewhat authoritative statements which I shall make, that I and my associates have been engaged in an extensive and intensive study of this question over a period of many years, and that we are in position to interpret contributions to the subject on the basis of a volume of precise data and a variety of experience which have not previously been available. It was on this account that I had no hesitation in indicating that the article of Dr. Horatio Williams was an inadequate and, indeed, romantic interpretation of a series of interesting and undoubtedly significant incidents. My comments were not intended as a display of my critical faculties, but rather were prompted by a feeling that your editorial staff ought to be made aware of the opinions of those who by reason of experience and knowledge were competent to appraise the article. It may interest you to know that no one person of experience and training in this field has spoken favorably to me of the article of Dr. Williams. Many were interested, few were convinced, and the well informed either ridiculed or deprecated it as the unfortunate result of an editorial oversight. The matter in the long run is of no great importance, but the editorial statement that "there can be no doubt about the incidents reported by Horatio B. Williams" is important, in that if it was meant to convey the idea that there is no doubt as to the significance of lead intoxication in the case,

assumption that lead absorption had played a part in its origin. Considering the flimsiness of the evidence of significant lead exposure and the complete though charming naivete with which it was presented, the diagnosis was little short of bizarre. I do not state that the diagnosis was incorrect, for perchance it may have been, but it was inadequate and ineptly supported, and obviously the source of the lead exposure, if such existed, was missed or at least undisclosed. In any case, considering the lack of supporting evidence, the diagnosis may just as well have been arrived at intuitively, and any attempts at evidence dispensed with.

There is another matter in the editorial letter, however, which is much more significant than the reference to Dr. Williams' article, in that Miss Conway's failure to mention "cases of lead poisoning which have resulted from tetraethyl lead in gasoline" is cited, presumably as an omission. It is hard for me to accept the fact that any member of the editorial staff of the Journal believes that there have been cases of lead poisoning from this cause, in face of the evidence against it and in view of the position taken by the United States Public Health Service on this question. In this particular, I am constrained to believe that Miss Conway is likely to be better informed than any other reviewer of the literature of lead poisoning, since she is the literature secretary in this laboratory, which has gathered and published practically all of the first hand information on this subject during the past ten years. We have been looking for cases of lead poisoning from this source, and have been studying the lead exposure incident to the use of leaded gasoline since 1925, and thus far neither we nor anyone else have found or reported a single case of lead poisoning, except in connection with the manufacture and handling of concentrated tetraethyl lead or with accidental exposure to or contact with the compound. I believe it is fair to say that the significance of the potential lead exposure associated with the use of leaded gasoline has been investigated more comprehensively and more critically than any other potential hazard which has developed out of modern technology, not only by governmental but also other publicly responsible agencies, such as this and other university laboratories. There are generally competent hygienists and experimental workers who are not convinced that no danger to the public health exists from this source, despite fifteen years of negative observations and experience. We ourselves have taken the position that although no such danger has been found through the use of highly sensitive and accurate methods of detection, further and maintained investigation is justified for present and future protection of the public health. Nevertheless no one has ever demonstrated the

Cases of tetraethyl lead poisoning have been described. Almost all of these, with a few exceptions outside of the United States, have been reported by me or one of my associates. I have reason to believe that all cases that have occurred, as well as the occupational or accidental circumstances that have given origin to them, whether here or abroad, have been reported to me in considerable detail. Therefore if you have any knowledge of any reports or publications that have dealt with cases of lead poisoning from exposure to leaded gasoline, I should be more than grateful to you for referring me to them. I would not be willing to say that lead poisoning cannot occur from any combination of circumstances associated with the handling of commercial leaded gasoline, although from experimental observations I believe that this is the case. I will say categorically, however, that to the best of my knowledge, after many years of active experience, no such case has yet occurred. Moreover, if I were in any great doubt on the latter score, I should be disposed to publish my doubts and to implement them with such data as would result in the abandonment of the use of leaded gasoline, and the elimination of such a danger.

Very truly yours,

RAK:is

Robert A. Kehoe, M.D.

KE 0015045