

CHRONIC LEAD POISONING IN INFANCY AND EARLY CHILDHOOD

Chronic lead poisoning occurs much more frequently among infants and young children than has been generally supposed. It would be a more prominent item in both morbidity and mortality records but for the fact that the condition is often unrecognized by physicians. This conclusion was based upon an inquiry recently made by the Metropolitan Life Insurance Company among a number of prominent pediatricists. Large numbers of such cases among children were disclosed in the practice of these doctors.

The most informing reply to the Company's letters was that of a physician who stated that fifty cases of lead poisoning in children had been seen in a single Boston hospital during the last six years, that diagnosis in these cases was "proven beyond a doubt" and that the lead had been ingested, for the most part, as the result of chewing paint from the woodwork or toys. Several pediatricists reported that they had demonstrated conclusively that lead pigments in shields and lead ointments on the breasts of mothers, who were suckling young infants, were responsible for lead poisoning which had now and then proved fatal. A majority of the pediatricists stated that chronic lead poisoning in infancy and childhood is by no means a rare condition, and almost all believed that wide publicity should be given to this fact through the press or the "popular" literature of health departments and private health agencies, with special insistence upon the dangers present in cribs and toys painted with material which contains lead.

One correspondent stated that he had made it a practice over a period of twenty-five years to warn parents about the danger of children developing a paint-eating habit, and another doctor wrote that he found intelligent parents fearful of wet paint but oblivious to the dangers of dry paint.

Lead poison is a real source of danger to infants and young children, and education of parents concerning this hazard would be a definite, forward step in public health education. Lead poisoning is rarely thought of as a cause of illness in infants and children. Private physicians having a general practice should consider more frequently the possibility that they may be dealing with this serious disease.

Metropolitan Life Insurance Company
Statistical Bulletin, October, 1930.

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ride, treacle, malt extract, dried yeast and potassium bromate. It was found that all the bakers who had suffered from dermatitis had been using yeast foods or accelerators containing ammonium or potassium persulphate and that the outbreak of dermatitis followed a few months after the introduction of this chemical in yeast foods, a practice new in Australia.

Water suspensions or solutions of whole products were used in testing. A typical subject, when tested, shows a marked wheal and erythema to most of the substances mentioned above, particularly malt wheat flour, while the reaction to ammonium persulphate in 5 to 10 per cent solutions is a great wheal and marked erythema which persist often for days, whereas the other reactions disappear within an hour or two. Often the testing lights up a resolving dermatitis. A 1 per cent solution applied over a few minutes does not produce a marked reaction.

Individuals unaffected by dermatitis have not reacted to these substances. Does the practice of bleaching flours have any bearing on this question? A critical appreciation of the results so far obtained will be published later, but one is tempted to forecast that bakers' dermatitis in Sydney in 1929 resulted from the unfortunate association of allergic individuals with aqueous solutions of persulphate.—Charles Badham *et al.* (see previous abstracts) E. R. H.

The Use of X-ray Machines in Shops or Other Industrial Places—It was found that in the use of X-ray machines in boot departments of several city shops the erythema dose which might produce burns to the customer was over 25 minutes where all the rays come through a lead glass covering the screen, but that a leakage around the screen might lead to a burn in a shorter time. As the exposure when fitting a shoe is generally well under a minute

there would appear to be little danger unless the use were repeated on successive weeks.

The machines however revealed a very definite hazard to the operator, particularly from insufficient protection from leakage around the screen.

It was therefore recommended: (1) that all X-ray machines in shops or other industrial places should be licensed after testing and inspection by the Board of Health; (2) that the present machines be immediately protected to the satisfaction of the Board of Health; (3) that in the case of machines used for shoe fitting, a notice be posted warning customers that their feet should not be exposed for more than 3 minutes in any one month, and that the use of the machines to search for needles and such like bodies is dangerous.—Charles Badham *et al.* (see previous abstracts).

E. R. H.

Chronic Lead Poisoning in Infancy and Early Childhood—The Metropolitan Life Insurance Company, as a result of a recent inquiry among prominent pediatricists, calls attention to the large number of cases of lead poisoning occurring among infants and children. The brief note points out that a Boston physician reports 50 cases of lead poisoning among children at a Boston hospital during the past 6 years. In these cases the diagnosis was proved beyond doubt, the source of lead being the paint on cribs, woodwork and toys.

It seems obvious that the simple precaution of using zinc paints in these cases should be resorted to. Lead poisoning due to the use of nipple shields and of lead ointments on the breasts of mothers was also considered a source of poisoning by the physicians interviewed.—*Stat. Bull.*, Metropolitan Life Insurance Company, 11, 10: 4 (Oct.), 1930. L. G.

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5. Of the total samples showing a positive presumptive test 100 per cent were confirmed for the new medium whereas only 68.7 per cent were confirmed for standard lactose broth.

6. The new Dominick-Lawter medium was found to be far superior to standard lactose broth for the detection of *B. coli* in water.

REFERENCES

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