

REVIEW OF REVIEWS

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DENTAL HYGIENE

Dr. Harold DeW. Cross, of Boston, states in *The American Journal of Public Health*, for March, 1926, what dentistry can do in behalf of the small child, from a hygienic standpoint.

“During the first two years of life—he says—dentistry can contribute very little to the general hygiene of the small child. During this time and later, we must depend mainly upon a pediatricist interested in the development of the teeth. But after the primary teeth are erupted—he states—dentistry may then step in and repair such development or organic defects as may exist. This work should begin between the ages of 2 and 3 years, and at the age of 6 years the same early attention is needed for the so-called sixth-year molar, because in a very large percentage of cases it is defective in its development. Unless this attention to both the primary and the secondary set of teeth is given almost immediately after the eruption of these teeth, it is too late to obtain the full advantages of early care and treatment, and to prevent such later troubles as are sure to follow.

“This plan of early attention has almost entirely superseded and overshadowed the purely technical matter of cleaning teeth as a means of controlling dental *caries* in the teeth of school children. Cleaning and brushing alone has practically no value and no effect on teeth in which these organic defects are permitted to remain uncorrected. There is nothing which will control this condition, except to cut out this diseased and defective tissue and replace it with a filling. Therefore, between the two conditions, cleaning teeth or early fillings, there can, in our estimation, be no doubt whatsoever as to the proper valuation for the purpose of dental hygiene—the one being practically useless, while the other will, if adequately carried out, give the most satisfactory results of any local care.

“If the plan of early treatment as suggested, could be adopted in all public-school clinics and in private practice for children, within a few years most of the procedures now considered good practice in dentistry, such as the insertion of large fillings and inlays, the construction and application of crowns, bridges and dentures, would be practically obsolete.

“While this early treatment produces such remarkable results—says Dr. Cross—it is not really dental hygiene, for there is something back of these organic defects—the systemic condition causing the defect. This, of course, is a nutritional factor and is distinctly a medical one. When more is understood about calcium metabolism and fixation, so that some procedure can be carried out to insure the development of teeth free from organic defects and with perfectly formed enamel and dentine, and the manner of maintaining this good structure is known, we shall then have the actual condition, now artificially attempted, or real dental hygiene.”

BOTULINUS POISONING DUE TO CANNED SARDINES

Dr. Hayhurst, of the Ohio Department of Health gives an account in *The American Journal of Public Health* for March 1926, of an outbreak of poisoning which occurred in Solon, Ohio, in June, 1925.

"A mother aged 43, a son aged 22, and a daughter aged 15, ate of the contents of a just-previously-opened can of sardines in tomato sauce on June 15, 1925. The can had been purchased two days previously at a chain grocery store in a nearby town. Its contents were not cooked or heated before serving. The daughter developed symptoms of botulinus poisoning within about thirty-six hours and died of the same in approximately one hundred hours. The mother developed similar symptoms within about forty-two hours and died of the same seventeen days later. The son, who barely sampled the contents of the can in question, developed no symptoms. The uneaten portion was fed to the family dog which apparently vomited it but showed no ill consequences.

"The can in question—goes on Dr. Hayhurst—was reported to have been swelled, when opened to have spurting over the immediate surroundings, including the dress of the daughter who opened it, to have had a 'rotten' odor and, at least to the son, a disagreeable taste. A double portion was eaten by the daughter, including most of the liquid part and one portion by the mother. The can itself was first discarded and then recovered from the garbage pile by members of the family three or four days after the date of the meal in question."

Bacteriological examinations of the scrapings from the can was reported positive for botulinus toxin by three different laboratories.

"The symptoms of poisoning, suffered by the victims are described as follows: Gradual development of motor paralysis of certain cranial nerves (3rd, 6th, 7th, laryngeal branch of the 10th, the 11th and the 12th—evidenced first by disturbance in vision, followed with slight nausea, a little vomiting in the first victim, obstinate constipation, inability to swallow, impairment of speech, etc.), with accompanying marked general weakness and anxiety, but without noteworthy gastro-intestinal, respiratory, circulatory or other manifestations. The victims suffered no chills, fever, particular sleep disturbances, pain, headache, impaired consciousness nor urinary disturbances. The reflexes of both upper and lower extremities were gone. No autopsies were held."

Other cans from the same pack obtained at the grocery store where the spoiled can was purchased were found to be bulged on one side, and on bacteriological examination of them were found to contain botulinus toxin.

After the accident, the Cleveland Health Department placed an embargo on all remaining stock of the sardine pack in question in that vicinity, and steps were taken by the U. S. Department of Agriculture to segregate the balance of the pack elsewhere.

"Dealers, purchasers, and food handlers should be constantly on

the lookout for 'flippers' and 'swells' in canned goods of every description and promptly destroy them," states Dr. Hayhurst.

SMALLPOX IN THE UNITED STATES

The following figures are given by *Public Health Reports* to show how small-pox has been appearing in the United States during the last three years:

Number of cases of smallpox in 38 States in 1923-----	21,233
Number of cases of smallpox in 38 States in 1924-----	43,029
Number of cases of smallpox in 38 States in 1925-----	31,037

The increase in 1924 over 1923 was 103 per cent and the decrease in 1925 from 1924 was 28 per cent. The figures for 1925 in these States were 46 per cent higher than those for 1923.

HOOKWORM INFESTATION

The following conclusions are reached by Smillie and Augustine, of New York, after a study of hookworm infestation in nearly two thousand children affected with uncinariasis of varied intensities:

1. Heavy hookworm infestation (500 *Necator americanus* or over), causes marked retardation in the normal growth in height and weight and lowers the hemoglobin of children of school age. An intensity of from 100 to 500 hookworms also produces measurable injury. Such intensities of infestation should be regarded as true hookworm disease.

2. Light hookworm infestation (from 1 to 100 *Necator americanus*) produces no measurable retardation in the normal development of children of school age, nor is the hemoglobin of this group reduced to a measurable degree.

3. An infestation of 25 *Necator americanus* may be considered as the economic base line of cure. An infestation of 25 worms or less represents a carrier state, and is not true hookworm disease.

4. Sanitation and education should be relied on to control the hookworm carrier. Hookworm treatment should be used only in cases of true hookworm disease.

5. The Stoll ova count method is a reliable measure of the intensity of hookworm infestation.

6. These conclusions apply only in areas in which *Necator americanus* is the principal infesting agent.

—*American Journal of Diseases of Children.*

BUREAU OF ORAL HYGIENE IN MICHIGAN

The following is taken from the January number of *Public Health*, the official bulletin of the Michigan State Department of Health:

"On January 1, 1926, a new bureau was organized in the Michigan Department of Health, a Bureau of Oral Hygiene and Preventive Dentistry. The Director is William R. Davis, A. B., D. D. S., who comes to the Department from the Flint Board of Health where he has been in charge of the oral hygiene work. Dr. Davis has not only had long experience in public health, but, as secretary of the Michigan State Dental Society, he has a valuable knowledge of conditions and needs throughout the state.

"The preliminary plan of work provides for the development of educational material of all sorts including suggested programs for work in different localities, and demonstration outfits for hygienists and dentists. Data will be gathered showing the cost per child of various types of oral hygienic work and results obtained as shown by actual examination. It is also planned to carry on, in selected schools, demonstrations of benefit from good mouth conditions."

ACUTE RESPIRATORY DISEASES

The second report of the Chicago Pneumonia Commission brings to light some interesting points in connection with the prevalence and prevention of acute respiratory diseases in children under 5 years of age.

According to this report, the annual death-rate in Chicago from acute respiratory diseases (pneumonia, acute bronchitis and influenza) in children under 5 years of age now exceeds the death-rate from acute diarrhea diseases.

The death rate, the report states, is highest in the one-month to one-year group, being 1,405 per 100,000 as compared with 190.4 in the age-group four to 31 days, and 172.6 per 100,000 in the group one to four years.

The reduction in the rate of acute respiratory diseases at the end of the five-year period average approximately 18.5 per 100,000.

Of, 6,601 cases of pneumonia investigated by the Pneumonia Commission between January and September, 1924, 2,009 or 30.4 per cent occurred in children under five years of age.

Bronchopneumonia caused 61.6 per cent of all deaths from the acute respiratory diseases in children under five.

The Pneumonia Commission makes the following recommendations, for the reduction of the acute respiratory disease rate in children under five.

1. Children suffering from acute coryza, sore throat or bronchitis should be excluded from attendance at kindergarten, and should be isolated in the home until recovered from such infection.

2. Vaccination against pneumonia as a protective measure is recommended in institutions for foundlings; in hospitals for babies

under two years of age; in all patients with measles and whooping cough cared for in institutions and in all patients quarantined in the homes during the winter months; in patients with rickets, especially when colored children are affected.

3. In all cases of measles and whooping cough, the patients should be protected against persons who have acute coryza, coughs, sore throat or bronchitis.

4. Diseased tonsils and nasal obstructions which interfere with free respiration should be removed.

5. Patients with measles and whooping cough complicated with pneumonia should be separated and isolated from patients not having such complications, and the room in which the patient is isolated should be maintained at a proper temperature, with the necessary humidity and ventilation.

—*American Journal of Diseases of Children.*

