PUBLIC HEALTH

Trichinosis Ten Times as Common as Has Been Supposed

Symposium On Infectious Diseases Also Hears That Maternal Extract Protects Against Children's Ills

TRICHINOSIS, a painful and sometimes fatal disease contracted through the eating of infected pork, is fully ten times as common as has hitherto been supposed. Not two per cent, but twenty per cent, of population samples studied had suffered from the malady at some time in the past.

This rather startling state of affairs in the nation's public health was revealed by Drs. Donald L. Augustine and W. W. Spink, of Harvard Medical School, at a symposium on infectious diseases, part of the celebration of Harvard University's third century of life. The figures are based on recent dependable studies of autopsy material in Boston, Minneapolis, and Rochester, N. Y.

Recent studies in his own laboratory have convinced Dr. Augustine that the commonly used diagnostic methods, of looking for the parasitic larvae in blood, spinal fluid, and body wastes, are a waste of time, and that microscopic examination of bits of the patient's muscle is of doubtful value. Far better, he declared, is a serological test which he has devised, using the parasites themselves to prepare an antigen. This method is specific for this one disease, except the skin tests when used in patients hypersensitive to other proteins.

Maternal Extract Protects

Measles in young children can be at least temporarily staved off, and other diseases of childhood mitigated, by an extract of the placenta, Dr. Charles F. McKhann of Harvard Medical School reported to the same symposium.

Dr. McKhann regards his discovery merely as something that will be useful for the time being, for the ultimate aim is to develop a satisfactory method of active immunization that will confer more lasting protection.

"Because the immunity conferred by the extract is passive and thus of short duration," he said, "modification of the disease with the resultant possibility of permanent immunity is to be desired in normal healthy children, whereas in sick, debilitated, or very young children complete protection should be obtained if possible.

"Placental extract appears to be at least as efficacious as convalescent serum and escapes the most serious drawbacks of the latter, in as much as it can be prepared on a large scale and can be partially standardized as regards activity."

The extract has one drawback, with certain individuals at least, causing sharp local reactions after injection. Administration by mouth is therefore being given a trial, and there are some indications that this method may result at least in modification of measles.

Varied Protection

In addition to the measles antibodies, the extract contains diphtheria antitoxin, substances neutralizing the virus of poliomyelitis or infantile paralysis, a substance that lyses or dissolves the dangerous streptococcus organism, and an antibody that blanches scarlet fever rashes.

Given intramuscularly or by mouth to children who are susceptible to scarlet fever, the extract is capable of rendering them negative to the Dick test for periods up to two and one-half weeks. This means that for that long at least they are immune to this dreaded malady of childhood. Further studies of the usefulness of the extract in preventing scarlet fever are now in progress.

Science News Letter, September 26, 1936

PUBLIC HEALTH

Health Officers Queried About Polio Protection

WHAT to do about infantile paralysis continues to worry not only parents but physicians and health officers. While the laboratory scientists are at work on the problem, searching for effective means of controlling this childhood scourge, those responsible for children's health and welfare wonder how they can best protect their young charges from the disease. Whether to vaccinate, to spray, to close schools are some of the unanswered questions.

A committee of the Essex County Health Officers Association of New Jersey tried to find the answer to these questions by sending a questionnaire to a group of city health officers throughout the United States.

The answers they received, as reported in the current issue of the *American Journal of Public Health* (September), show a wide variety of opinion. Some health officers frankly said that so little was known about the disease that they were reluctant to commit themselves.

On two points there was general agreement of opinion. One of these was that the infection enters the body through the upper part of the nose and pharynx—the space back of the nose leading toward mouth and throat—and that the virus of the disease reaches the individual by direct contact, usually through sneezing, coughing, kissing and droplet infection.

The other point generally agreed on was that all infantile paralysis patients should be sent to hospitals because this gives the patient a better chance for recovery and also avoids alarm throughout the community.

After considering the answers to their questionnaire and other medical opinion, the Essex County committee drew up a set of eight regulations which they believe to be the best practice at present. While these are only in force in Essex County, other communities may wish to consider them. They are as follows:

Rules of Best Practice

1. Hospitalization of all cases is advised.
2. Immediate report by physicians to the local health department of all cases of paralysis, as well as those showing fever, headache, vomiting, and stiffness of the neck is urged.
3. Services of a diagnostician should be available when possible.
4. The opening of schools should be postponed during an epidemic.
5. Playgrounds should be closed or else used for separate classes during recess periods, with no mixing of grades.
6. Swimming pools should be kept open but regularly chlorinated during epidemics.
7. Contacts under 16 should be put under observation for at least 14 days.
8. The public should be advised against allowing children under 12 years of age to attend circuses, fairs, picnics, and movies.

Science News Letter, September 26, 1936