MEDICINE

Simple Polio Test

➤ A SIMPLE test for diagnosing polio, one of the most pressing needs in the fight against the disease, is now in the development stage.

Such a test for one strain of the virus has actually been worked out by Drs. Jordi Casals and Peter K. Olitsky of the Rockefeller Institute, New York, with the assistance of Major Ralph O. Anslow of the U. S. Army.

But the test is not yet ready for general use, Dr. Casals stated in reporting it to the Second International Poliomyelitis Conference in Copenhagen, Denmark.

It is of the type known as complementfixation, which is the same general type of test used in the Wassermann test for syphilis.

Discussing the need for such a test, Dr. Joseph E. Smadel of the U. S. Army Medical Service Graduate School said that present tests for polio, which require the use of monkeys or at least mice, are "cumbersome, expensive and highly technical procedures.'

The need for a simple diagnostic test was further pointed up by Dr. Robert Debré of Paris, who said that diseases ranging from arthritis to pneumonia can be mistaken for polio when the diagnosis is made on the basis of the symptoms.

Good news for polio fighters appeared in the report that probably only three strains of polio virus exist. Scientists at one time feared there might be many more, which would greatly complicate both diagnosis and any chance of developing a vaccine against the disease.

The report that there are apparently only three was given by Dr. Jonas Salk of the University of Pittsburgh School of Medicine who is chairman of a committee of scientists from four universities who have been working on the problem of classifying the strains of polio virus.

Of 100 strains studied so far, 85 are of the Brunhilde type, 12 are Lansing type and three are Leon type.

Science News Letter, September 15, 1951

NUTRITION

Antibiotic for Chick Growth

➤ WHEN CHICKS grow faster after being fed penicillin, the reason seems to be that lurking micro-organisms affecting them are suppressed.

This has been discovered by a dual experiment in which a batch of chicks was split and raised with identical feed at the National Institute for Research in Dairying at the University of Reading and at Glaxo Laboratories, Ltd., in Greenford, Middlesex, England.

At the Greenford laboratories the chicks without penicillin did just about as well as those with the antibiotic raised at the same place where chickens are not normally raised. The Greenford chicks did about as well as the pencillin-treated chicks at Reading, but the birds without penicillin at Reading were markedly lighter and slower to grow.

The two groups of scientists in a report to the journal, NATURE (Aug. 25), conclude

that the growth stimulation is due to a clean-up of some organism that gets established where poultry is raised.

Since dramatic results in America and elsewhere have been widely reported for additions of antibiotics and vitamin B-12 to poultry feeds, the British results may be useful in practical chicken raising.

The scientists suggest that the antibiotics may also stimulate growth by creating in the chicken's food-using mechanism conditions more favorable for the manufacture and use of vitamins, such as animal protein factor (APF), necessary to good growth.

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