

MEDICINE

Throat Swab for Polio

► **TESTS** TO see whether people can be protected against polio by swabbing their throats with a weakened polio virus are now under way, Dr. Albert B. Sabin of the University of Cincinnati College of Medicine announced at the meeting of the Association of American Physicians in Atlantic City, N. J.

The Salk polio vaccine now being given to thousands of school children across the nation is made from killed polio virus. But Dr. Sabin has long thought that a live virus bred to lose its paralyzing power might give better immunity.

He pointed out that polio is generally more severe in adults than in very young children and that any method of immunization must avoid the possibility of creating a large adult population without resistance to the disease.

Natural infection, he also pointed out, seems to provide the body with a "built-in" booster mechanism. After once being infected with the virus, even without further infection, the body continues to produce specific polio antibodies for as long as 40 years.

Polio viruses which have through mutation lost their ability to produce disease in

chimpanzees have been fed in a teaspoonful of milk to volunteer inmates of a Federal Reformatory. The volunteers, aged 21 to 30, were shown by tests to lack antibodies for one or more types of polio viruses at the start of the experiments.

The studies showed, among other things, that more antibodies were formed when the virus multiplied in the throat than when it multiplied in other tissues of the body. This suggested that a more localized infection with better immunologic response, or protection, might come from swabbing the virus directly on the throat.

Dr. Sabin is also now investigating the behavior of Types 1, 2, and 3 polio viruses, recovered from healthy children. These viruses do not produce disease in monkeys even when injected directly into the monkeys' brains. These will be compared with the strains that do not produce disease in chimpanzees, to see which of the weakened viruses are best to use and whether best protective results can be had from giving the virus in milk or from swabbing it on the throat.

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Virus During Pregnancy May Give Child Palsy

► **VIRUS INFECTIONS** in prospective mothers during early pregnancy may have some effect in producing cerebral palsy and other congenital disorders in their children.

This is suggested in preliminary experiments at the University of California at Los Angeles Medical Center.

In studies by doctors in the departments of pediatrics and infectious diseases, influenza and distemper viruses were injected into fertile hen eggs.

About a day after inoculation, chick embryos infected with flu viruses had sharp bends in their backs and a day later these embryos also showed extensive brain and eye damage.

Distemper-infected embryos developed large lesions on the extra-embryonic membranes and died about eight days later.

While emphasizing that animal experiments can seldom be translated directly into human terms, the investigators said their experiments did suggest an explanation for certain congenital abnormalities and disorders in humans.

When human mothers have serious virus infections in early pregnancy damage to the embryo may result, they point out. Women who have German measles during pregnancy often have children born deaf or with eye cataracts. It is possible that brain damage to a human embryo may occur with such virus infections as flu in the pregnant mothers.

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