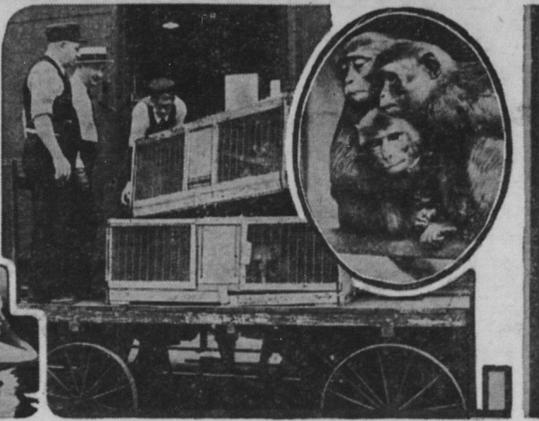


Fight Spread of Paralysis Epidemic

By WILLIAM C. UTLEY
 APPROXIMATELY 350 cases of poliomyelitis—"polio" for short and popularly known as "infantile paralysis"—have been brought to light in North Carolina in one of the worst epidemics of the dread disease in recent history.

The epidemic is rapidly spreading north into Virginia. Its further course will probably be checked with the advent of cooler weather, for polio is a summer disease, and by the efforts of local, state and federal health authorities. They have turned the area into a



Left: Exercising the muscles of an infantile paralysis victim in the underwater treatment. Above: A new shipment of Rhesus monkeys arrives from Asia to provide experimental serums. Right: Ready to give their lives for science.



gigantic human laboratory for the study of the use of vaccines in immunizing persons to the disease. Medical authorities on the spot believe it will prove to be the most important experiment of its kind ever undertaken.

North Carolina's plight follows in the wake of lesser epidemics in California and elsewhere. The very seriousness of the increase in infantile paralysis cases may prove to be a blessing in disguise if enough can be learned about the insidious virus, which twists and cripples bodies, to protect humanity against it in the future.

The first widespread attack of polio was noticed in Jackson County, in the far western part of North Carolina. From there the disease jumped, in the words of Dr. J. C. Knox, state epidemiologist, "like a skyrocket," and "burst" in Raleigh and the rest of Wake county, all the way across the state, on the Atlantic seaboard.

It is believed that the disease in North Carolina has been checked and is abating, but in Virginia the number of cases reported is on the upturn, its course having seemingly followed the highways over the entire length of the state, with no indication yet as to where its spread will stop.

Cause of Spread Unknown.

Just how the disease was carried is not known. Direct contact with a diseased person is not necessary to contract it. It almost never strikes two members of the same family. "Carriers"—people who have such mild cases of polio that they do not even feel sick—carry the virus to others whose natural immunity is low and who therefore contract the disease in considerably more violent form. That is much the same as the manner in which typhoid fever and diphtheria are spread. A single carrier, unknown to himself, may create several severe cases.

When a few carriers hit a region where the natural immunity of the people is relatively low, an epidemic is usually the result. That is probably what happened in North Carolina and Virginia.

While the disease is not nearly so much confined to young children as the term infantile paralysis would suggest, it is still more prevalent in children of five or less than in any other age group. For that reason the one sure preventive is a difficult one to administer. It is complete isolation. The only way to be absolutely certain of keeping children from catching polio is to keep them away from all playmates and from all crowds and public gatherings. The same applies to adults, but they are not so likely to catch it.

Unfortunately there is no sure way to tell who is immune and who is not. And there is no means of effecting artificial immunity which has been satisfactorily proven. Vaccines which may do the trick are being tested now in the southeast epidemic.

Dr. Maurice Brodie, working under Dr. William H. Park, head of the New York city health department, has developed the Park-Brodie vaccine. Another has been developed by Dr. John A. Kolmer, of the Temple university medical school in Philadelphia. With the William H. Merrell company, manufacturing chemists of Cincinnati, Doctor Kolmer is providing between 6,000 and 7,000 "shots" of the vaccine free every month—enough to vaccinate about 3,000 children.

Test Two Serums.

Neither of these vaccines must be believed to be a cure. They are merely preventives. Both of them contain the polio virus—not a bacterium, but a poison. The Park-Brodie vaccine contains the "killed" virus and Doctor Kolmer's contains the greatly weakened virus. Both have been known to produce in animals an immunity which lasts about two years. How long it will last on human beings has not yet been determined, for it has not yet had sufficient test.

A necessary requisite for both vaccines is the Rhesus monkey, the little "blushing" monkey, so called because of the way his face gets red when he is excited, which we see in zoos.

Rhesus monkeys are imported from India, where they are held to be sacred, at a cost of \$10.00 each. In preparation for giving his life that humanity may be saved from the scourge of polio, the monkey is quarantined for two weeks to make sure that it is in good health. At the end of that period it is given an ether anesthetic and the polio virus is injected through its skull into the brain. Infantile paralysis develops.

When the disease reaches its climax, the monkey is killed and its spinal cord, full of the virus, is removed. This cord is hacked up into tiny bits and immersed in a salt solution in a vessel which contains a number of steel balls a half inch or so in diameter. While the vessel is shaken and agitated for 12 hours, the balls crush the bits of spinal cord to a pulp. The fluid which is thus obtained is attenuated with sodium ricinoleate and allowed to incubate for eight hours. Then it is strained and purified and put into bottles which hold five cubic centimeters each, enough to bring immunity to three children.

The cost of making a three-dose treatment is \$2.00. In order to reduce this cost—which is forced by the high cost of importing the animals—Doctor Kolmer suggests that a laboratory be established right at the source of supply in India. There the spinal cords could be prepared and the vaccine shipped out in a solution of glycerine.

Children Replace Animals.

While indications certainly point to the fact that at last artificial immunity has been perfected, the vaccines are still, admittedly in the experimental stage. The last great experiment is one of the most dramatic medical tests that could be imagined.

For instead of monkeys or white mice, the laboratory subjects are boys and girls. Some of them are selected to receive the vaccine and an equal number are selected as "controls" who will not receive the injections, but who will be observed for symptoms exactly the same as the vaccinated subjects.

All selections are made by lot. Absolutely no partiality is shown. To insure against the personal acquaintance element which might destroy the impartiality so vital to such an undertaking, the administration of the tests has been taken out of the hands of local authorities. Medical men from the United States public health service are operating to relieve local physicians from the inhuman task. Dr. James P. Leake directs the work.

Dr. A. G. Gilliam, at Greensboro, N. C., has been charged with the thankless job of deciding which children are to receive the vaccine and which are to act as controls. It is he who must listen to the piteous pleading of parents that their children be given the chance for immunity. Here is something which may prevent their loved ones from contracting one of the most dreadful of all diseases. Even if it does not work it will do no harm.

But humanity must know for certain whether it will work. And if such knowledge is ever to be acquired, the tests must be conducted impersonally. The vaccine must be administered to children of all classes—the poor, the rich, the intelligent, the unintelligent. It must be given to many whether their parents want them to have it or not. And it must be withheld from others whose parents have, like one of the most prominent surgeons in the South, fought tooth and toenail and pulled every string in desperate attempt to secure immunization for them.

Selecting the Subjects.

There is drama for you! What heroes these federal men are to be able to withstand the frantic pleading of loving mothers and straw-grasping fathers!

Here's the way Doctor Gilliam does it: Parents who desire vaccine for their children register with their family physician. Half the children are selected for vaccine and the other half as controls by Doctor Gilliam's office. Then those to be vaccinated are ordered to report back to their physician and are given the vaccine. The physician must give it as ordered, must account for his supply, because the federal men have the names of the recipients on file and the recipients themselves under observation. The idea, of course, is to observe whether fewer cases develop among the vaccinated group than among the control group.

Of course other tests are being made. It is being found that injections of serums prepared from the blood of convalescent cases is not harmful, but is also of very little help. Dr. W. Lloyd Aycock, of the infantile paralysis commission of Harvard university, believes that heredity is an important factor and is making experiments to determine the truth of his assumption.

Symptoms Often Unrecognized.

Infantile paralysis in a locality where there is no epidemic is often unrecognized until actual paralysis sets in. At first it looks like any one of a number of other infectious diseases. There is headache, vomiting, drowsiness, irritability, fever, flushing, congestion of the throat and great sweating at night. Usually early symptoms are stiffness of the back and neck. Since the inflammation reaches the nervous system, there may be pain in the muscles and joints, tenderness of the hip and pain in moving any of the joints. This latter pain may be so intense that any slight movement will be almost unbearable.

As soon as the doctor suspects polio, he will probably want to make certain laboratory tests to make sure, for there are other diseases, such as meningitis, which affect the spinal cord. He will probably inject a needle into the spinal cord and draw off some of the fluid to examine it.

In the early, or preparalytic stages, the disease may resemble a severe summer cold and is indeed upon instance without more harmful permanent effect than a cold. Early and correct diagnosis is of great importance.

The victim is immediately put to bed and given absolute rest. Perhaps the doctor will administer a convalescent blood serum or a vaccine, the usefulness of neither of which is certain. The patient is kept away from all contact with others. And that is about all that can be done at that point.

Six or eight weeks may be the period during which all movement or exertion is highly dangerous.

The apparent helplessness of the physician during this period sometimes drives frightened parents to accept the remedies of so-called "natural healers" and other quacks which often destroy the patient's chances for survival.

Exercise Must Be Gradual.

Not until every trace of tenderness is gone can even the simplest of muscle exercises begin. Fatigue must be avoided. Relaxation and ease must be encouraged. Swimming pools and underwater treatment are desirable in most cases. This method was discovered in a Chicago hospital. The development of the Warm Springs, Ga., pool under the patronage of its most distinguished visitor and patient, President Franklin D. Roosevelt, and using his name for its natural publicity value, has encouraged many cities to maintain pools for the underwater treatment of infantile paralysis.

Much of the rebuilding process depends upon the patient himself and the attitude of the persons with whom he comes in contact during convalescence. It is the tendency of many families to pamper and pity the child who has some physical defect such as that which may be brought on by paralysis, and the child too often for his own good takes advantage of the situation. While such a child should not be spoiled, he should be entertained, encouraged and treated as a perfectly normal member of the family insofar as possible, according to authorities.

Slowly but certainly, mankind is going to learn how to beat poliomyelitis, just as it has other diseases. One of the most important steps will be the experiments now being conducted in North Carolina and Virginia.

Meanwhile, parents whose children have been afflicted need only to examine history to take heart. To mention only two, there are men who have attained great heights although victims of infantile paralysis. Sir Walter Scott was struck down by the disease when hardly more than a baby, yet lived to become immortal in the world of letters; Franklin D. Roosevelt did not contract it until he was a fully grown man, yet he is today President of the United States and one of the most tireless dynamos of energy in all history.

The moral is: Take heart—and don't give up!

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"Dutch Girl" String Holder for Kitchen

By GRANDMOTHER CLARK



As a decorative hanger for the kitchen, this little girl will add another smile to your home. It's an attractive string holder and costs only a few cents and a little spare time. An acceptable gift novelty, and after you make up one you will want more of these Dutch Girls to serve you.

This package No. A 1 contains stamped material ready to be cut out, also died out girl's head and shoes printed in colors on heavy board. This material and directions how to make it up will be mailed to you for 15c for one package or four packages for 50c. Address Home Craft Co., Dept. A, 10th and St. Louis Ave., St. Louis, Mo. Enclose a stamped addressed envelope for reply when writing for any information.

Tells on Tax Dodger

A burglar has helped the authorities of Carlsbad, the Bohemian holiday resort, to deal with a case of evasion of taxes. He broke into a Carlsbad shop and robbed the till, taking away an account book with him.

Evidently he knew something of accountancy, for a few days later the police received the book by post with numerous items marked in red pencil. "Dodging his taxes. Make him shell out!" an enclosed note urged, and the figures showed systematic evasion of the turnover tax. The authorities have decided to continue searching for the burglar, all the same.

DIETARY HABITS NEED FOSTERING EARLY IN CHILD

Nothing is quite so important to health as food. The wellbeing of a child depends on it, and his future stamina will reflect nutritive discrepancies in babyhood.

The mother who thinks that there is time enough ahead for corrective diet is laboring under a traditional delusion that up until two years of age and sometimes longer, milk is the sum total of everything.

Milk is the warp and the woof of what it takes to get through life, and especially at its beginning. But it needs supplementing, because its chemistry is low in a few needed essentials and the child, set in his all-milk diet, resists other foods.

Doctors Prescribe Varied Foods.

Doctors long ago recognized the value of adding other foods to the diet of milk, early in babyhood, in order to offset future finicky appetites. Thus the infant of six weeks gets his cod-liver oil and orange juice or tomato juice; a little later a spoonful or two of prepared vegetable juice or even the strained vegetable itself. At a period that in the past would have been considered murderous he gets his bit of cereal, part of the yolk of an egg, a snack of baked potato and mashed steved fruit.

Whatever today's baby is given, should, of course, be absolutely under the doctor's direction. There is a difference in babies.

But the great truth that many mothers do not know is that children with touchy appetites at six or eight or ten years of age, are the results of fixed preference in babyhood.

Caution Must Be Exercised.

Another thing that should be remembered is that as milk must be the alpha and omega of his meal,

therefore the amounts of other food given must not be so great that the willingness to take milk is decreased.

The doctor will give you lists and schedules for feeding. My suggestions here are only for one purpose. That is to show "why" and "how" aversions to needed foods are started. Food habits, which mean flavor habits, have to be cultivated early.

Weeping Women Flee Sale

Weeping bitterly, hundreds of fashionably-dressed women ran from bargain counters into the street, tying up traffic in Nice, France, recently. Gas fumes which had quickly filled the building caused the stampede and many bargains were ground under foot.irate shoppers declare the gas attack was the work of rival stores, but others feel sure it was the deed of a practical joker.

Quick, Pleasant Successful Elimination

Let's be frank—there's only one way for your body to rid itself of the waste material that causes acidity, gas, headaches, bloated feelings and a dozen other discomforts. Your intestines must function and the way to make them move quickly, pleasantly, successfully, without griping or harsh irritants is to chew a Milnesia Wafer thoroughly, in accordance with directions on the bottle or tin, then swallow.

Milnesia Wafers, pure milk of magnesia in tablet form, each equivalent to a tablespoon of liquid milk of magnesia, correct acidity, bad breath, flatulence, at their source, and enable you to have the quick, pleasant, successful elimination so necessary to abundant health.

Milnesia Wafers come in bottles at 35c and 60c or in convenient tins at 20c. Recommended by thousands of physicians. All good druggists carry them. Start using these pleasant tasting effective wafers today.

Save with Simoniz!



Simoniz your car... you'll find it pays! Simoniz makes a car beautiful to stay—and the finish lasts longer. Cleaning, too, is easy! A dry cloth wipes dust and dirt off without scratching. And, your car sparkles as bright as ever again.

MOTORISTS WISE

SIMONIZ

Blake makes a Fresh Start

NO! NO! THAT'S NOT THE CLUB I WANT! LISTEN—GO BACK TO THE CLUB HOUSE... YOU'RE THE WORLD'S WORST CADDY!

GREAT WORK! YOU CERTAINLY MADE HIM FEEL LIKE A CHAMPION NIT-WIT!

WHY, DADDY... THAT'S NO WAY TO TREAT THE BOY! HE DIDN'T DO ANYTHING WRONG!

OH, WELL... LET'S QUIT! I DON'T FEEL LIKE PLAYING ANYWAY! I'VE GOT A TERRIBLE HEADACHE!

SWELL! BREAK UP THE GAME... MAYBE THAT WILL TEACH HER TO KEEP QUIET!

I'M SORRY YOU FEEL BADLY... BUT YOU WON'T FEEL ANY BETTER UNTIL YOU GIVE UP COFFEE... AS THE DOCTOR SAID!

RATS! WHO EVER HEARD OF COFFEE HARMING A GROWN MAN?

WHY DO THESE SILLY YOUNG KIDS BELIEVE SUCH CRACKPOT THEORIES?

BUT YOU KNOW YOU HAVE COFFEE-NERVES... AND THE DOCTOR SAID SWITCHING TO POSTUM WOULD HELP! YOU MIGHT TRY IT!

OH, ALL RIGHT... I WILL TRY IT, TO PROVE THAT DOCTORS DON'T KNOW IT ALL!

CURSES! STUNNED AGAIN! I CAN'T STAY HERE IF HE'S SWITCHING TO POSTUM!

"I always thought this talk about coffee being harmful applied only to children!"

"Oh, no, Daddy... many adults, too, find that the caffeine in coffee can upset nerves, cause indigestion, or prevent sound sleep!"

If you suspect that coffee disagrees with you... try Postum for 30 days. Postum contains no caffeine. It's simply whole wheat and bran, roasted and slightly sweetened. It's easy to make, and costs less than half a cent a cup. It's delicious, too... and may prove a real help. A product of General Foods.

FREE! Let us send you your first week's supply of Postum free! Simply mail the coupon.

General Foods, Battle Creek, Mich. U.S.A.—22-22

Send me, without obligation, a week's supply of Postum.

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This offer expires July 1, 1935