

MEDICINE

Nephritis From Tonsillitis

EITHER TONSILLITIS or impetigo can trigger an inflammatory disease of the kidneys in children, a Memphis pediatrician reported.

The disease, acute nephritis, is caused by sensitization to products certain types of streptococci produce, Dr. James G. Hughes told family doctors attending the American Academy of General Practice meeting in Philadelphia.

The most common symptoms are blood in the urine and puffy swelling of the face and other parts of the body. The child has a high fever, poor appetite and usually a higher blood pressure than normal.

The University of Tennessee professor said three major complications can result. The central nervous system can be affected, making the child drowsy, lethargic, unconscious or convulsive. There can also be a temporary disturbance in vision, he said.

Other possible disturbances include heart trouble, with shortness of breath, coughing, swelling of the liver and lower parts of the body, and uremia, the complete cessation of kidney functions and failure to form urine to remove body waste products.

In treating the child with acute nephritis, the physician must remember that the original strep infection may still be present. If a throat culture shows streptococci, Dr. Hughes advised giving the child a shot of penicillin to kill the organisms and to keep the infection from spreading to other persons.

Until the acute phase of nephritis has passed, the child should be kept in bed. There is usually no need to restrict the child's diet or fluid intake, he said. However, if the child is not forming enough urine, it is important not to overload him with fluids and to avoid high intakes of nitrogenous and potassium-containing foods that would increase the biochemical disturbances.

Ills Show in Check-Ups

REGULAR PHYSICAL check-ups reveal some previously unrecognized disease in one-fourth to one-third of supposedly healthy adults, a physician reported.

In about half these cases the patient has not experienced any symptoms of the disease in question, Dr. Norbert J. Roberts, associate medical director of Standard Oil of New Jersey, reported at the meeting.

Fifteen to 20% of patients examined periodically, he added, need medical observation or treatment for disease or defects that were previously known to exist.

Chemical Poisoning Toll

MORE THAN 400 American children under five years of age die each year of chemical poisoning, Dr. Harold Jacobziner of the New York Department of Health told the meeting. Last year, he said, more New York City children under five died

from accidental poisonings than from diphtheria, polio, and streptococcal infections such as rheumatic fever, scarlet fever combined. Prevention of accidental poisonings is possible through education at all levels of the profession and public, Dr. Jacobziner said.

Boil Baby's Bottles?

BABY BOTTLES need not always be boiled, a pediatrician reported.

To back up this statement, Dr. Carl C. Fischer, head of the department of pediatrics at Hahnemann Medical College, Philadelphia, explained his simple and safe method of feeding infants which he devised to relieve young mothers of some of their work load.

The method consists of mixing evaporated milk and ordinary hot tap water. The hot water saves time by eliminating the need to reheat the bottle before feeding, he pointed out to colleagues attending the meeting.

Results of a study revealed no statistical difference in weight gained between those babies fed formulas by this method and those fed sterilized formulas.

Furthermore, there was no evidence of gastrointestinal infection in either group, he pointed out.

Bacteriological studies showed that single feedings prepared from sterile milk and hot tap water, immediately refrigerated, remained sterile for an indefinite period (longer than 24 hours).



INFRARED SCANNER—This 50-pound gyroscopic far infrared scanner, made by the Martin Company's Baltimore Division, will be used for missile guidance or interplanetary navigation. Project engineer Irving E. Distelhorst's face is reflected in the scanner's primary mirror.

In contrast, those similarly prepared with homogenized grade A milk showed an increased bacterial count.

Dr. Fischer did emphasize that this method should be confined to single feedings and all unused portions of each bottle should be discarded immediately. Also, mothers must obey strict sanitary rules and follow instructions carefully, he reminded.

Further comments on infants' diets also came from colleague Dr. Walter W. Sackett Jr. of Miami, Fla., who stated that a six-month-old child often enjoys, and is not harmed by, an occasional cup of coffee. Driving home the point that infants can eat solids, he cited his success with two- and three-day-olds who ate and enjoyed cereal.

He also recommended strained vegetables for the 10-day-old and meat for those two weeks old.

Science News Letter, April 2, 1960

ROCKETS AND MISSILES

Vanguard Rises, Sinks A Mile Every 850 Days

A TEAM of scientists have discovered that solar radiation pressure accounts for the discrepancy between calculated and observed heights of Vanguard I when it is closest to earth.

Dr. Peter Musen, Robert W. Bryant and Ann Bailie, all of the theoretical division of the Goddard Space Flight Center of the National Aeronautics and Space Administration, reported to Harvard College Observatory, Cambridge, Mass., that the height of Vanguard I at its perigee, or point closest to earth, varies over a period of 850 days due to the pressure exerted on the satellite by rays from the sun.

Dr. Musen said that over this period of time the satellite rises and sinks approximately a mile at the point closest to earth. He began investigating the idea of solar radiation pressure at the suggestion of Drs. Robert Jastrow and John A. O'Keefe, both of NASA, when disturbances caused by the earth's irregular shape and the sun and moon's gravitational forces did not account for this variation.

Science News Letter, April 2, 1960

BACTERIOLOGY

Roaches May Spread Food Poisoning Germs

COCKROACHES may be spreading food poisoning germs, a study at Kansas State University indicates. Dr. T. H. Lord, Kansas State bacteriologist, captured 100 groups of brown-banded roaches and found that about one-fourth contained the bacterium *staphylococcus aureus*, which is responsible for food poisoning. Because 25% of the roaches contain this germ, Dr. Lord thinks it reasonable to assume that food poisoning germs may be spread to uncontaminated food, or to other places, by these insects. The brown-banded cockroach is difficult to control, he said, because it will travel over a wider area in search of food than the German cockroach.

Science News Letter, April 2, 1960