MEDICINE

Sulfapyridine on First Day Ideal in Pneumonia Cases

Deathrate in Johns Hopkins Hospital Already Reduced By Two-Thirds, Physician Reveals at National Meeting

ALMOST all deaths from pneumonia could now be prevented if pneumonia patients were given proper treatment on the first day they got sick, Dr. Perrin H. Long of Johns Hopkins School of Medicine told members of the American College of Physicians meeting at New Orleans.

The millenium of no more pneumonia deaths, which probably could be achieved by the new chemical remedy, sulfapyridine, will probably never be reached, Dr. Long said, because pneumonia patients do not see a doctor on the first day they are sick—in fact, usually not until they are desperately sick.

Sulfapyridine, however, has cut the pneumonia death rate at the Johns Hopkins Hospital two-thirds, Dr. Long reported. Only eight patients have died of pneumonia there since last July 1, when sulfapyridine treatment was started. Of these, four had pneumonia serum treatment alone, one had serum plus sulfapyridine, and three had sulfapyridine alone. The total number of pneumonia patients was 107.

Serum would not be necessary in the treatment of pneumonia, Dr. Long said, if sulfapyridine could be given the patient the first day of his illness. From the standpoint of cost alone this would be a tremendous advantage. It costs about twelve dollars to treat a case of pneumonia by sulfapyridine but the cost of serum treatment is at least seventy-five dollars. Serum is not always available, whereas sulfapyridine is both available and effective in all types of pneumonia.

Dr. Long and Prof. E. K. Marshall, Jr., of Johns Hopkins have increased the efficiency of sulfapyridine by combining it with sodium. This makes it possible to inject the drug into the patient's vein, an advantage because in the first place many pneumonia patients are too sick to swallow medicines and in the second place it makes the drug act faster since it is now possible to get the most effective concentration of the drug in the blood within five minutes.

Sulfapyridine saves pneumonia-threatened lives apparently by slowing down the growth of the pneumonia germs. This gives the patient a chance to build up his own immunity or resistance to them and so to recover. After the drug has been given the temperature goes down but the patient still has pneumonia until his immunity reaches the point of overcoming the invading germs.

Sulfapyridine is also useful in treating infections with staphylococci, the germs which cause boils among other things. It is too expensive to be used for boils but is being used in more serious staphylococcus infections. It is not, however, the final answer in these conditions. Something better must be found, Dr. Long said.

For streptococcus infections, the chemically related and older sulfanilamide is more reliable than sulfapyridine because it is more readily absorbed. At least five million persons in the United States have been treated with sulfanilamide, Dr. Long estimates, since he first introduced it from abroad in the fall of 1936.

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MEDICINE

New Germ Suspected of Causing Rheumatic Fever

THE BEST lead in recent years toward the solution of the major disease problem of rheumatic heart disease, which afflicts almost one out of every 100 children in the nation and kills at least 43,000 persons annually, has been obtained at the Hospital of the Rockefeller Institute for Medical Research.

A germ of an unfamiliar kind, which might be the cause of the disease, has been obtained from a number of patients with acute rheumatic fever. Description of the germ and the special technic by which it was obtained are reported by Drs. Homer F. Swift and Thomas McPherson Brown. (*Science,* March 24).

They have dropped other important work temporarily in order to push their investigations, partly because of the importance of the new research and partly because now is the middle of the rheumatic fever season.

Drs. Swift and Brown do not claim that this germ is the cause of the disease, because they do not yet know whether or not it is.

"Further work will be required," they state, "to demonstrate the etiologic significance of these pathogenic agents in rheumatic fever."

If the pleuropneumonia-like organisms obtained by Drs. Swift and Brown from rheumatic fever patients prove to be the cause of the disease, there is hope that in the future a vaccine or similar method of protecting children from the ailment may be developed.

The pleuropneumonia-like organisms now under investigation because of their possible causative role in rheumatic fever belong to a class of germs that have not been very well studied. They are different from the more familiar kinds of germs that cause human ailments.

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DUMMY

This tumbler is made of such thin, porous clay fired at so low a heat that it could never hold a long, cool drink. People of Susa, in the region now Iran, made dummy dishes about 4000 B. C., thinking them right to use in graves. Artistically, the ware is admired by archaeologists, who say Susa's potters have "seldom been surpassed in workmanship." The Buffalo Museum of Science has received this tumbler and other pieces as a permanent loan from the Louvre in Paris, which explored Susa's ruins. This is some of the world's oldest pottery.