

MEDICINE

Conflicting Views on Leprosy To Be Aired at Conference

View That Buffalo Leprosy and Other Animal Diseases Are Same as Human Leprosy Disputed; Prevention Urged

CONFLICTING views on the age-old scourge of leprosy are being thrashed out this week as experts on the subject gather for the Fourth International Leprosy Conference at Cairo, Egypt.

Fresh leads for an attack on this plague may even be developed. That is the hope of Dr. Victor G. Heiser, one of the American delegates to the conference. The line along which Dr. Heiser hopes for new leprosy-fighting developments is in the study of a leprosy-like disease recently discovered in water buffalo. He believes that the discovery of this disease suggests that at last scientists may have, in the water buffalo, a "guinea pig" for the study of human leprosy.

This is a moot point which promises to furnish plenty of discussion, the argument centering over whether or not this or any other so-called "leprosy" in animals is the same as human leprosy or nearly enough like it to furnish knowledge that would lead to conquest of the old Biblical plague which is still a major disease problem in many parts of the world.

"Buffalo leprosy" was discovered by Dr. L. W. M. Lobell of the Veterinary Institute at Buitenzorg, Java. It is an infectious disease of the water buffalo, caused by an acid-fast micro-organism, which is said to show very close resemblances to nodular leprosy in humans. Laboratory examinations of the germ and of the tissues of infected animals and the nature of the disease make this animal ailment of "great interest in connection with the study of human leprosy," Dr. Heiser explained before sailing for the conference where he is to discuss reports of this animal disease.

"Rat Leprosy"

"Heretofore rat leprosy has been the only widely known disease of lower animals analogous to the human affection," he continued, "although rat leprosy has wide differences from human leprosy."

The question of whether the causative organism of "buffalo leprosy" is identical with that of human leprosy and whether mutual infection—buffaloes with

human leprosy germs and vice versa—is possible has not yet been accurately determined, Dr. Heiser pointed out.

"It is expected," he said, "that at the International Congress of Leprosy additional evidence will be available to ascertain whether an experimental animal for human leprosy has been found."

Many leprologists are not so optimistic. They take the view, as expressed by Dr. Earl B. McKinley, dean of George Washington University Medical School, that leprosy in man is one thing and acid-fast bacterial infection in animals is another. (The leprosy germ is an acid-fast bacillus.)

"It is ridiculous to talk of leprosy in mice because acid-fast bacilli have been discovered in one mouse," was Dr. McKinley's forceful comment on a recent, much-heralded discovery of so-called mouse leprosy.

Large Group

The point Dr. McKinley and many bacteriologists and leprologists who agree with him take is roughly as follows: There is a large group of micro-organisms, small, slender rods, which will hold a red stain or dye even when washed with acid. (Hence the name acid-fast, though it is now better form to call this group mycobacteria.)

These micro-organisms cause a lot of different diseases. Most prominent of the group is human tuberculosis. Next on the list is leprosy. Then come tuberculosis in cattle; Johne's disease or paratuberculosis of cattle; acid-fast bacterial diseases in cold-blooded animals including snakes, fish and frogs; avian tuberculosis which afflicts birds and fowl; and finally, a group of mycobacterial or acid-fast bacterial diseases in rats, mice and water buffalo.

Acid fast bacteria are also found in the soil and in water and are pretty generally distributed, so that they could be picked up by animals from many such sources. The chemistry of these mycobacteria is also very much the same, although a few important differences have been found by Dr. Rudolph Anderson and associates of Yale University. That

is part of another story, however.

Because the germs are so much alike, some scientists for years have been considering some of the animal infections akin to human leprosy. The point does not seem to have been settled yet, though the coming conference may bring agreement. Meanwhile Dr. McKinley declares:

"So far as we know, no other leprosy but human leprosy exists."

Wants Preventorium

A definite plan for conquering leprosy by eradicating it from future generations will be presented by Dr. H. E. Hasseltine, medical director of the U. S. Public Health Service in charge of the National Leprosarium at Carville, La.

Dr. Hasseltine's plan is to establish a Preventorium, in the vicinity of the National Leprosarium, to which children of leprosy parents may be admitted, cared for and educated at government expense until they reach their majority. Such a plan, Dr. Hasseltine believes, would go a long way toward conquering leprosy, in the United States at least, because it would prevent its development in future generations.

Nothing like a specific remedy has yet been discovered for this age-old plague, Dr. Hasseltine says, so preventive measures must be used as far as possible. The Preventorium might not be practical in countries where there are large numbers of lepers, but he believes it would cut down the number of lepers in the United States in the future.

Leprosy in children can generally be traced to infection from a leprosy parent or other relative, such as a grandparent. This is probably not a matter of inheritance but of infection by contact. When a child is taken from its leprosy parent at birth, it may escape the disease. This much Dr. Hasseltine has learned from his long study of leprosy both in the United States and Hawaii, although he points out that much is still unknown about how leprosy is transmitted.

The mystery is a hard one to pierce because apparently many years may elapse between the time when a person, often unknowingly, picks up the germ of leprosy and the time when symptoms of the disease first appear.

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The advanced step of counting 365 days to the year, instead of 360, was made by the Egyptians in the year 4236 B. C.