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TULAREMIA IN COTTONTAIL RABBITS  
Charles K. Kirkpatrick

Tularemia or rabbit fever is an infectious disease primarily found in rabbits, but is also found in other wild animals and occasionally in birds. Man is susceptible to the disease. According to present knowledge, domestic rabbits kept in pens do not normally contract the disease.

The Organism

The disease is caused by a bacterium, scientifically known as Pasteurella tularensis, a microscopic organism which does the damage after entering the blood stream. The disease is apparently transmitted from rabbit to rabbit by ticks, fleas, and flies. There is no evidence of widespread epidemics among Indiana cottontails, and presumably the disease does not greatly reduce the wild rabbit population.

Incidence Among Hunters

Since most rabbit hunters are interested in the risk to themselves in handling wild rabbits, a 1942 study of tularemia in Indiana is pertinent. During the period 1928 to 1941, 528 cases of tularemia were reported to the Indiana State Board of Health, and 71 cases or 13.4 percent resulted in deaths. Where it was possible to trace the source of infection, most of the persons had come in contact with a rabbit, presumably a rabbit sick with tularemia. During 1941 about 254,000 persons hunted rabbits and 33 cases of tularemia were reported. Adjusting for cases in non-hunters, it was shown that approximately one rabbit hunter in 5,241 contracted the disease.*

Precautions

Avoid handling sick rabbits. The rabbit that runs weakly or that is caught alive by the hunter should not be handled. Once a rabbit is bagged, if it seems light and in poor condition it should be discarded then. Rabbits with tularemia usually have the liver marked with numerous white or yellowish spots the size of pinheads or smaller. If only a few spots are seen which are about the size of peas, and seem to be little sacs with white centers, these are almost certain to be a common parasite of rabbits, and are harmless to humans. If the hunter suspects tularemia from his examination of the liver, he should discard the carcass and wash his hands thoroughly with soap and water as soon as possible. Rubber gloves are valuable as a precautionary measure, but are probably less important as a safeguard than simply avoiding the sick rabbit.

Human Symptoms

In most human cases the germ enters the blood stream through cuts or sores on the hands, or possibly through the eyes, nose and mouth. Within a week or less after exposure the victim becomes ill with fever, chills, headaches and general prostration. Tenderness and swelling may occur at the joints and the amput region. If the organism enters at a break in the skin, a small ulcer may occur and persist there for several weeks. Any person who becomes sick with these symptoms following contact with a wild rabbit should consult a medical doctor.

* This study was made by the Indiana Department of Conservation in cooperation with the Purdue University Agricultural Experiment Station and is reported in the Indiana Department of Conservation Quarterly Progress Report of Wildlife Research, October 1, 1942.