1940

My Experience With Tularemia

Banner Bill Morgan
University of Wisconsin

Follow this and additional works at: https://lib.dr.iastate.edu/iowastate_veterinarian

Part of the Animal Diseases Commons, Small or Companion Animal Medicine Commons, and the Veterinary Pathology and Pathobiology Commons

Recommended Citation
Morgan, Banner Bill (1940) "My Experience With Tularemia," Iowa State University Veterinarian: Vol. 2 : Iss. 2 , Article 3.
Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol2/iss2/3

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Veterinarian by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
My Experience With Tularemia

Banner Bill Morgan*

O N OCTOBER 13, 1939 (Friday), I was doing routine autopsy work on cottontail rabbits at the Zoological Laboratory, University of Wisconsin. The rabbits were box trapped at the University Arboretum, brought in alive to the laboratory, and later killed for endocrine and parasitological studies. The handling of wild rabbits called for care, so all necessary precautions were taken; such as rubber gloves, disinfection, and careful disposal of the carcasses.

On this particular day ten rabbits were brought in for examination. Things were going along uneventfully until the ninth rabbit. Rabbit No. 9 showed typical lesions of Tularemia in the liver and spleen. The lesions were in the nature of minute white necrotic foci.

Parts of the liver and spleen were ground in a mortar and suspended in sterile physiological salt solution. One c.c. of this material was injected intraperitoneally into two guinea pigs. The animals were quite depressed at the end of eight hours and twenty-four hours later both animals were found dead. No attempt was made to culture the organism.

Work was continued on the rabbits but no more cases of Tularemia were encountered. Five days after the examination of the rabbit with Tularemia, I began to feel rather ill. At this time I happened to be in the office reading when I noticed my eyes smarting; a dull headache caused me to stop reading and I began to wonder what was wrong. Checking my temperature I found it was 103.5 degrees. About an hour later I received a telephone call from a graduate assistant who was helping with the rabbit autopsy work. He stated he was not feeling so well and complained of a dull headache and sore eyes.

We decided to go to the college infirmary for an examination. The above story was told to the resident physician, who made a careful examination for any signs of skin lesions. There were none. We were admitted to the hospital and assigned a room, (313), in the isolation ward.

A positive diagnosis of Tularemia was not made until two weeks later when my blood had a high enough titre to agglutinate with the tularense antigen. During these two weeks I complained of severe headaches and a high temperature. Also various lymph nodes enlarged, particularly the epitrochlear and axillary nodes.

The second week, things took a turn for the worse. Severe gastric pains caused me to lose my appetite. Since I vomited when given food, I was given glucose intravenously to prevent debilitation. Insomnia due to the gastric pains was relieved somewhat by various sedatives. The various drugs taken to permit sleep included chloral hydrate, nembutal, morphine, and codeine. Hypodermic injections were taken to deaden the pain.

After a few days I slowly regained my appetite. Before each meal belladonna and calcium carbonate were taken to quiet gastric motility. Headaches and fever still persisted. Also from midnight to the wee hours of the morning the bed clothes were changed from three to four times due to perspiration.

After the second week (14 days) a positive diagnosis of Tularemia of the typhoid type (no primary lesion) was made and arrangements for treatment were underway. I thought perhaps I might receive sulfanilamide but instead,

* Formerly Assistant, Veterinary Pathology, Iowa State College, now Research Fellow, University of Wisconsin.
serum from hyperimmune horses was used. About this time I had a chill that really rattled the bed springs. After twenty minutes with eight blankets, six hot water bottles, and four pretty nurses I finally quieted down. We were then tested for horse serum sensitiveness and reacted favorably. Serum was administered intravenously for a period of five or six days in doses varying from 50 to 60 c.c until 310 c.c were given.

The fifth day taking serum is the strongest in my memory as I had a serum shock that nearly made me shake hands with St. Peter. I seemed to bounce around like a jitterbug on hot rocks. Recovering from the serum shock I figured I was on the road to recovery with so much horse serum. I guess all the chills and serum shocks were the kick I was getting from the horses.

I was somewhat surprised when the physician stated I would go through an ordeal worse than Tularemia after taking horse serum. This was in the nature of "serum sickness" due to the large amounts of horse serum in my system. It was explained to me that various free protein molecules were running wild or playing tag with my reticuloendothelial system. The first thing I knew I had the prettiest strawberry rash—similar to that of scarlet fever. I had to suppress the desire to scratch the itchiest spots.

To make matters worse I came down with bronchopneumonia. That really bothered me and I worried all night because I had no life insurance. As you probably know, this type of pneumonia is not caused by any specific organism, but results from the constantly high fever. That called for good old fashioned mustard plasters twice a day for ten days. I might mention from the time I entered the hospital to the day I was able to get out of bed, mineral oil was taken daily and enemas every other day.

After the rash disappeared edema of the joints set in. This was quite painful. Four days later I was so stiff I could not move without agony. This lasted about a week and finally subsided. It was during this period I had some fancy nightmares. One night I dreamed I shot every cottontail rabbit in Russia, got into a fight with a couple of Cossacks and had a stiff shoulder to prove it the next morning. I also invented a machine that could diagnose Tularemia at twenty paces.

After the serum sickness was over I began to feel pretty good. I even started to kid the nurses again. The nurses pampered me by tying ribbons in my hair as I had not had a hair cut for six or eight weeks. After being flat on my back for six weeks I was allowed to sit up and look at the surrounding scenery. Then I had to learn how to walk again. The first time was fine with a pretty nurse on each side of me to hold me up. I felt like a turnip on two toothpicks. Two days later I could navigate under my own power, but my legs ached so I had to sit down frequently. I walked to the scales and weighed myself. I had lost about thirty pounds.

I was dismissed from the hospital about December 10 and Christmas vacation was spent recuperating. My titre was checked which showed a low of only 1 to 240. According to experts I am to have life immunity.

During my stay in the hospital I was particularly grateful for the many letters which I received from former colleagues at Iowa State College.

This story was written in the lighter vein because of the seriousness of the disease. I did not think it wise to put upon the readers too much of the suffering and gruesome experience Tularemia really is. My only advice is, if you like wild rabbits better stay home with the wife and kids and eat chicken.

Drs. Foust and Venzke of the Anatomy Department attended the meetings of the American Association for the Advancement of Science, held during the holidays, at Columbus, Ohio.

Dr. Walsh of the Obstetrics Department attended the Wisconsin State Veterinary Association where he gave a report on "Vaginitis in Cattle."