



Tularemia in Cats

Because of the recent cases of plague in cats and associated press releases this summer, we have been receiving a number of feline samples where plague is a differential. One such case presented as an animal with swollen submandibular lymph nodes with a request to rule out plague. Our routine in such cases is to check for both plague AND tularemia. The FA exam on samples from this cat which originated in Big Horn Basis was positive for tularemia. Therefore we thought it time for a short item on tularemia.

Tularemia is caused by the bacterium *Francisella tularensis*. There are 4 strains of the organism, two of which (type A and B) cause disease in cats. It is generally assumed that tularemia is underdiagnosed in cats. Type A causes a more serious disease in people. Dogs do not seem to be very sensitive to infection but serological surveys indicate that dogs are exposed to the disease and serologically convert, rarely with evident disease. The organism is transmitted by the bite of ticks and other biting insects. It can also be transmitted through consuming infected animals. This bug is indiscriminate in that it infects a whole host of animals from production animals to amphibians. Tularemia can be contracted after exposure to as few as 10 bacteria.

Cats develop abscesses which can be at the site of the insect bite along with high fevers and enlarged lymph nodes. Abscesses may also form in the spleen and liver because there is probably a septicemic phase of the infection. Animals may also have discharges from the eyes and nose, and may have a rash.

Diagnosis of tularemia can be done by serology which is a test offered by the WSVL through cooperation with the Wyoming Game and Fish Laboratory. The bacteriology section of the WSVL performs an FA on tissues. The definitive diagnosis is by isolation of the organism.

The best way to prevent cats from contracting tularemia is good flea and tick control. Keep in mind that restricting cats from consuming rodents or rabbits is important.

A [good reference](#) to take a look at was a zoonosis update on Tularemia written by Feldman and published in JAVMA, Vol 222, No. 6, March 15 2003. The article also contains some suggestion on antibiotics although there are no specific studies on treatment of cats and dogs for tularemia. The [CDC web site](#) has two fact sheets on the disease with a human health emphasis.

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