

Cryptococcosis neoformans in Cats

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Cryptococcosis in Cats Cryptococcosis

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Cryptococcosis is caused by a fungus, *Cryptococcus neoformans*, which is widespread in the environment and can infect cats, dogs, and people. While this fungus is widespread, it infects a relatively small number of animals. It is primarily a problem in animals that have a deficient or suppressed immune system. This fungus is well known in human medicine as the disease that infects up to 20% of AIDS patients. The organism is relatively easy to diagnose and treatment can be performed successfully if instituted early.

Where is it found?

Cryptococcus is widespread throughout all of North America. The fungus has been isolated from several different locations including soil, fruits, and even the skin of healthy people. While it can be found almost anywhere, the primary source of exposure to people and animals is in bird excreta. Even more specifically it appears to be very closely associated with pigeon feces. The high body temperature of pigeons prevents them from becoming infected, but the fungus can pass through their GI tract and become concentrated in their feces. The high level of creatinine in pigeon feces also creates an environment that is desirable for cryptococcus and if the fungus is protected from drying or sunlight it may live for up to two years.

How do pets or people become infected?

Pets and people contract the *Cryptococcus* infection primarily by inhaling the fungal particles. After the particles are inhaled, they can take up residence in the nasal cavities or lungs. Some studies have shown that in a population of healthy dogs up to 14% of them had *Cryptococcus* present in their nasal cavities. In a similar study of healthy cats, up to 7% contained the organism in their nasal passages.

After *Cryptococcus* reaches the lungs or nasal cavity, it can do one of several things. In most healthy animals, the fungus remains isolated and never creates any symptoms of problems. In animals with a suppressed immune system, e.g., from excessive steroid use, the disease can progress and create granulomas, [pneumonia](#), or systemic disease and symptoms. In addition, cats that have immunosuppressing diseases such as [feline leukemia](#) or [FIV](#) are also more likely to develop severe disease.

What symptoms are present?

Cryptococcosis affects cats of all ages and breeds. Some studies have shown that Siamese cats may be slightly more susceptible to the disease than other breeds. A group of 100 cats with cryptococcus were examined for the incidence of different symptoms. 50% of the cats had sneezing and nasal discharge, 40% had skin lesions, 35% had a nasal mass, 10% had eye problems, and 10% had central nervous system problems. Most infected cats did not have a fever but many chronically infected cats were lethargic, did not eat, and suffered from weight loss.

How is it diagnosed?

Diagnosis can be successfully achieved by several different methods. One of the fastest and easiest ways to get a diagnosis is to examine the discharge from the nose or skin lesions. *Cryptococcus* is usually present in high numbers in the discharge and can be identified under the microscope. A blood test is also available to identify the fungus. The latex agglutination test is the most widely used and accurate of the blood tests and can be performed by a veterinarian. Identification of the organism through cultures or biopsies can also be used.

How is it treated?

Treatment of cats usually involves the use of oral [itraconazole](#), [fluconazole](#), or ketoconazole. These drugs have some potential side effects and must be used for several months or longer to be effective. Intravenous treatments of the drug Amphotericin B can also be used but may be more toxic to some animals.

Because of the high incidence of an underlying immunosuppressing disease with cryptococcal infections, a complete work-up of all infected animals should be performed. The underlying condition should be treated to ensure the success of treating the cryptococcal infection.

How can you prevent it?

There are currently no vaccinations available to prevent cryptococcus. *Cryptococcus* is primarily only contracted from the environment, so the best prevention is to keep pets away from areas that are contaminated with the fungus, especially areas with pigeon feces. Transmission from infected animals to other animals or people is extremely rare and not considered a risk.

References

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