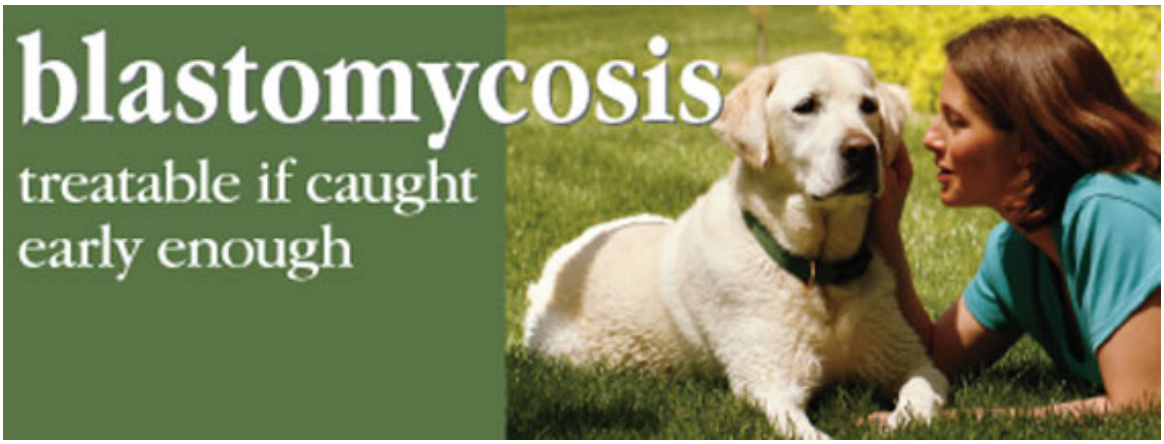
Blastomycosis in Dogs

Drs. Foster & Smith Educational Staff



Joanne, a Minnesota customer, called in recently to ask that we include an article on a fungal disease that had affected two of her dogs. The disease, known as Blastomycosis or Blasto, had been diagnosed too late to save her yellow Labrador Retriever Jamie, but Shilo, her Shepherd/Boxer mix, was diagnosed and received treatment early. As of this writing, Shilo is recovering well.

Blasto primarily infects dogs and people. It can create a variety of respiratory, eye, and skin lesions but can be successfully treated if caught early enough.

The cause, *Blastomyces dermatitidis*, is a spore-forming fungal organism that lives in sandy, acidic soil in close proximity to water. The organism is often found in small pockets instead of being widespread. The proximity to water appears to be very important.

Blasto is usually found in the Mississippi, Missouri, and Ohio River valleys, the Mid-Atlantic States, and parts of Quebec, Manitoba, and Ontario. It may also be found in other areas.

Blasto can infect dogs and humans, but dogs are 10 times more likely to develop the disease, with hunting dogs, hounds, intact males and younger dogs most frequently infected.

Infection most often occurs when the dog inhales the Blasto spores found in the soil. The spores travel down into the lungs and an infection develops. Once established in the lungs, it then spreads throughout the body. The most common secondary sites include the skin, eyes, bones, lymph nodes, brain, and testes. Additionally, dogs can get a localized skin infection from Blasto. This type of infection usually occurs following a puncture wound.

Symptoms

Symptoms include lack of appetite, fever, weight loss, coughing, eye problems, lameness and/or skin problems. Signs are usually present for a few days to a few weeks. During the course of the disease the symptoms may improve slightly only to worsen again.

Diagnosis, Treatment, and Prevention

Blastomycosis is diagnosed based on history, symptoms, radiographs, blood tests and identification of the organism under a microscope. The safest and most effective way to treat Blasto is oral administration of the anti-fungal drug Itraconazole. Other drugs may be given if Itraconazole is not effective. Treatment must usually be given for 60-90 days. Prognosis depends on the organs affected, the health of the animal and the severity of the disease when treatment is started.

There is currently no vaccine available to protect against Blastomycosis. It is difficult to determine where the source of most infections comes from and avoidance is almost impossible. Limiting the amount of time a dog spends in the woods, particularly near water sources, may help reduce the incidence of this disease. Blasto can only be acquired from exposure to the Blastomycosis spores; either through inhalation or a puncture wound.

Knowing if Blastomycosis occurs in your area, recognizing the symptoms, seeking prompt veterinary attention and following through with the treatment are the best ways to deal with this disease.

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