Blastomycosis--Fungal Disease Common in Outdoor Dogs

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**Office of Public Engagement**
2001 S. Lincoln Ave., Urbana, Illinois 61802
Phone: 217/333-2907 217/333-2907

By Sarah Probst, Information Specialist
**University of Illinois**
**College of Veterinary Medicine**

The beagle came in with a painful right knee and a persistent cough lasting 2 to 3 weeks. Other than that, the physical exam was unremarkable. All vaccinations were up to date. Thinking it could be a bacterial infection, the veterinarian almost prescribed antibiotics but decided to do a radiograph (X ray) just to be sure. The radiograph revealed a BB lodged in the dog’s knee, but the veterinarian knew that wasn’t the problem. The radiograph of the lungs had a miliary-blizzard-like-pattern which made the hunting dog a possible blasto patient.

Blastomycosis, a fungal disease caused by Blastomyces dermatitidis, occurs primarily in humans and dogs, but has also been described in horses, cats and even sea lions, said Dr. Ronald D. Smith, professor specializing in the epidemiology of infectious diseases at the University of Illinois College of Veterinary Medicine. Soil wet with organic matter is ideal festering ground for this fungus; most cases have been reported around the Mississippi River system and the Great Lakes. Illinois is located in the Blasto Belt for humans and animals alike. Retrievers, beagles, and other hunting dogs are particularly susceptible to getting blastomycosis because of their outdoor activities.

The infective stage of the fungus resides in the soil near waterways. The organism may be inhaled, initiating a lung infection, or may enter through wounds. As the organism multiplies, it moves from the lungs or wound to the vascular system or lymph nodes.

If your pet has blastomycosis, you might notice weight loss, loss of muscle tone, a chronic cough, shortness of breath, skin lesions, and generalized disease. You may also notice eye problems, including redness, pain, swelling, excessive tearing, clouding of the corneas, and even blindness. Recovery without drug therapy is rare. The earlier the treatment the better. If the infection enters the bloodstream and spreads to other organs, the treatment success rate declines.

Many pets are hospitalized several times a week during the first part of treatment but will eventually be treated as an outpatient due to the long therapy blastomycosis entails. As the fungus dies, inflammation may occur and your dog’s signs may temporarily worsen. Drug toxicity may also be a problem, so therapy requires veterinary oversight. When your pet
comes home, it is wise to feed a high-quality diet and restrict exercise over the duration of
the disease.

Some animals have an immune reaction to the infection, and these animals have a poor
chance of survival. Pursuing long-term therapy—which can be painful and expensive—may not
be the best choice for these dogs. Even after treatment, the infection can remain dormant
for many years and then reappear. However, after a year of remission without disease
recurrence it is unlikely that your pet will have another occurrence of the disease.

Although blastomycosis can affect humans, it cannot be transmitted through the air. Handle
bandages carefully for these animals, because on rare occasions the fungus can grow in
bandages or on open wounds. Most human cases are contracted in the same way as pet
cases—in nature. If your dog has blastomycosis, it is unlikely that you could get the disease
from your pet, but it could indicate that you have both been exposed to a contaminated
environment. However, your pet is 10 times more likely to get the disease after being
exposed to the same contaminated environment, because your nose isn’t as close to the
ground as your dog’s.

There is no vaccine to protect your pet from blastomycosis. The only protection lies in
restricting your pets access to suspected blasto® areas and seeking quick veterinary
attention if your outdoor dog has symptoms. For more information please contact your local
veterinarian.