

Spirit Min Pins

Spirit Min Pins is all about Miniature Pinschers



Giardia in Dogs and Cats

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Giardia

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Giardia are actually protozoans (single celled organisms) and are commonly found in the intestines of many animals, including dogs. This microscopic parasite clings to the surface of the intestine, or floats free in the mucous lining the intestine. A few percent of dogs and cats will carry Giardia organisms and not show any signs of disease. Actual diarrhea, bloody or mucousy stool often accompanied by gas production is seen most often in affected puppies and kittens. Giardia can have a significant impact on the health status of malnourished and stressed pups and kittens. Dogs that are stressed nutritionally or by exposure or by strong physical activity may have a previously low grade giardia infestation flare up into a significant disease.

Life Cycle

Giardia occurs in two forms: a motile (swimming) feeding stage that lives in the intestine, and a non-motile cyst stage that passes in the feces. Encystment occurs as the parasite travels from the small intestine to the large intestine. The cysts are fairly resistant, and can survive for several months outside the animal as long as sufficient moisture is present. Mature cysts are usually found in the feces of infected animals. Animals become infected by ingesting these cysts. The ingested cysts then break open in the new host's intestine to release the motile feeding stage (trophozoite). Giardia reproduce by a process of cell division (called binary fission).

Different species of Giardia are structurally very similar. It was customary to give each Giardia a different name when it was found in a new host. For examples, the Giardia in dogs was called Giardia canis; in cattle, Giardia bovis, and so on. Today scientists believe that only a few species occur, and each species can infect more than one host. However, more research is needed to identify each species and determine the hosts they can infect.

Giardia is transmitted from one dog to another through the ingestion of cysts in contaminated feed or drinking water. Cysts may also be found in streams or other water sources. The trophozoite stage may also be infective to dogs. This stage does not survive for very long after being voided in the feces. Therefore, it probably does not contribute significantly to the transmission of Giardia.

Human Exposure

Giardia can infect humans. The clinical signs are similar to those reported for dogs. The significance companion animals play as a source of infection for humans is still under study. Until it has been proven otherwise, we should assume that Giardia can be transmitted from one animal to another, and from other animals to humans.

The significance of Giardia in dogs is still not certain. Although Giardia has been reported from dogs with diarrhea, it has also been reported in apparently healthy dogs. Clinical signs usually occur in dogs less than one year of age. But giardiasis may also occur in older dogs, or in animals suffering from other diseases, or those undergoing chemotherapy. Any immune suppressing factors in a dog or cat may allow a latent Giardia infestation to convert to a significantly important consideration.

Scanning electron micrograph of Giardia attached to the inner surface of the intestine.

Signs of Giardia in dogs and cats

Clinical signs range from none in asymptomatic carriers, to mild recurring diarrhea consisting of soft, light-colored stools, to acute explosive diarrhea in severe cases. Other signs associated with giardiasis are weight loss, listlessness, mucus in the stool, and poor appetite. These signs are also associated with other diseases of the intestinal tract, and are not specific to giardiasis; therefore positive identification of these organisms is an important aspect of a thorough patient work up.

Diagnosis is confirmed by finding the cysts or motile stages in feces. [Read the note from Dr. Dunn below.] A negative report does not rule out Giardia! Because cysts are only passed periodically, several fecal examinations may be necessary to diagnose this parasite. At least three fecal samples, examined over a period of seven to ten days, should be examined. Special stains can be used, too, to assist in identifying these microscopic invaders.

Treatment for Giardia

There are two antiprotozoal drugs commonly recommended (metronidazole and quinacrine). Contact your veterinarian for the drug of choice and treatment program. All infected animals should be treated whether or not they show clinical signs.

More information about this and other problems you can go to the following link:

<http://www.iacuc.arizona.edu/training/dogs/diseases.html>