



Giardia Infection in Dogs

Giardia are sometimes confused with worms because they invade the gastrointestinal tract and can cause diarrhea. They are not worms; instead, they are one-celled parasites classified as protozoa.

Most dogs that are infected with *Giardia* do not have diarrhea or any other signs of illness. When the eggs (cysts) are found in the stool of a dog without diarrhea, they are generally considered a transient, insignificant finding. However, in puppies and debilitated adult dogs, they may cause severe, watery diarrhea that may be fatal.

Infection

A dog becomes infected with *Giardia* when it swallows the cyst stage of the parasite. Once inside the dog's intestine, the cyst goes through several stages of maturation. Eventually, the dog is able to pass infective cysts in the stool. These cysts lie in the environment and can infect other dogs. They may also be transmitted through drinking *infected* water.

Diagnosis

Giardiasis is sometimes diagnosed by performing a microscopic examination of a stool sample. The cysts are quite small and usually require a special floatation medium for detection, so they are not normally found on routine fecal examinations. Occasionally, the parasites may be seen on a direct smear of the feces. A blood test is also available for detection of antigens (cell proteins) of *Giardia* in the blood. This test is probably more accurate than the stool exam, but it requires several days to get a result from the laboratory performing the test.

Giardiasis can be very difficult to diagnose. Therefore, some veterinarians choose to treat the dog with one of the safe and very effective medications. If successful, this approach will eliminate the parasite even though a confirmed diagnosis is not made.

Treatment

The most common drug used to kill *Giardia* is metronidazole, an antibiotic-type drug. It is given for 5-7 days. Other drugs are also used if diarrhea and dehydration occur. If metronidazole is not effective, others are available.

Transmission to Humans

Giardia can also cause diarrhea in humans. Therefore, environmental disinfection is important. The use of chlorine bleach, one cup in a gallon (500 ml in 4 liters) of water, is effective if the surfaces and premises can be safely treated with it.