

Giardia

By Dr. Karen Becker

Original Video

Hi! This is Dr. Karen Becker. Today we are going to discuss giardia.

Giardia are flagellated protozoa, or one-celled organisms that live not only in the small intestine of dogs and cats, but also in most wild animals and, actually, in a lot of people living in third-world countries.

There's much that isn't known about the giardia parasite. We don't know how many species there are exactly and which ones affect which animals. We also don't know everything about the life cycle of all the giardia species. It's generally assumed that while infection with giardia is common, acquiring disease from the infection is less common.

Giardia is ubiquitous in the environment. It's all over. It's out there in rivers, ponds, and puddles. It can be found in a whole bunch of places. It's also zoonotic, meaning that if the family dog has it or the family member has it, the entire rest of the family – humans and animals – can be infected with it. Puppies acquired from puppy mills and other facilities that house lots of dogs commonly carry the giardia parasite.

Causes of Giardia Infection in Pets

A dog gets giardia by ingesting an infected cyst shed by another animal's poop or in another animal's feces. Contamination can occur directly or indirectly with contact of these infected cysts. The most common route of a transmission is through contaminated water. The giardia parasite prefers cool, moist environments.

Once inside a dog or cat's small intestine, the cyst opens and releases the active form of the parasite. These forms are then able to move around and attach themselves to the walls of the intestine, where they reproduce via dividing in two. They split into two. Eventually, giardia encysts (builds a cyst around itself) and they're passed out from a dog or cat's body in the feces. Those feces can contaminate the soil, grass, water, or wherever dogs or cats poop.

This also means that if your dog is giardia-positive and licks her butt, then licks another pack member, then there's a potential for transmission to occur this way.

Signs and Symptoms

The majority of giardia infections are asymptomatic, meaning there's no obvious symptoms that your dog is infected. When symptoms are present, the most common one is diarrhea, which can be acute, chronic, or fluctuant.

Many dog owners don't consult their veterinarians about their dog's soft, mushy stools, because oftentimes the stool improves on its own. About the time that you're considering calling your veterinarian – about loose stool – oftentimes, the stool firms up and all seems to be well. The owner just assumes that maybe the dog got into something or ate something that didn't agree with him. The cases of giardia then continue to go undiagnosed.

After a week, a month, or sometimes years of undiagnosed giardia infection, a giardia-positive animal can experience an acute and very debilitating bout of bloody, dehydrating diarrhea. Most dogs with diarrhea will not lose their appetite, but they oftentimes – with chronic cases – lose a lot of body weight.

A giardia infection interferes with digestion and inhibits absorption of nutrients. It can also damage the lining of the intestine. In fact, this particular parasite is one reason why we can see chronic GI inflammation in dogs and cats. I get a lot of referrals at my hospital for inflammatory bowel disease. Many of my IBD patients have a history of being giardia-positive when they were little kitties or little puppies. I also see a number of pets with chronic diarrhea that suffer from malabsorption and other digestive issues, who actually end up being giardia-positive.

Giardia Diagnosis in Pets

Diagnosis of giardia is done through a special fecal test. If you're trying to determine on your own by looking at your dog or cat's poop to see if your dog or cat is giardia-positive, don't bother, because this particular parasite is microscopic. You won't see any evidence by examining your pet's poop.

In 2009, I read an article suggesting that in-house parasite analysis testing – which means stool tests that are checked in your vet's clinic – were yielding up to 30 percent false-negative results. This means that vets were erroneously telling clients that their pets were parasite-free, when they actually weren't. I decided to test this theory and sent all of my fecal samples to our local laboratory versus in-house testing for a more comprehensive stool analysis. Interestingly, the number of giardia-positive pets in my practice began to increase.

I believe that national veterinary labs like Antech and Idexx, which use standardized equipment that returns consistent reliable results, reduce the amount of fecal in-house testing errors.

There are also some parasites like giardia, which may not consistently be shed in every pet's stool sample. This is why I recommend any patient with a history of bowel problems be tested for giardia with an ELISA test. A fecal ELISA test is different than a fecal flotation examination. Because not every giardia-positive patient sheds a cyst in every stool sample, an ELISA test checks for giardia antigens present in the animal's body versus looking for actual cysts in the stool.

Many vets don't routinely run this test. If your pet is suffering from chronic diarrhea, make sure you ask for a fecal antigen test in addition to a regular fecal float.

Unfortunately, giardia is growing resistant to many of the common antiprotozoal medications – with a result being that pets can become persistent carriers. If your pet has been tested positive for giardia, hopefully your dog or cat has cleared the infection successfully after treatment.

Because the ELISA test can show positive for up to six months after treatment as all the giardia antigens are being cleared out of your pet's system, it's important that you check your pet several times. We recommend once a month for three to four months with a fecal float afterwards to make sure that he or she is really negative. As I mentioned, dogs don't shed the cyst in every stool sample, so checking multiple times is a really good idea.

This might seem confusing, but the diagnostic test for giardia – the ELISA test – isn't a good post-treatment follow-up test. If that makes any sense – hopefully, it does.

Protect Your Pets from Giardia Infection

Okay. How to avoid giardia? Avoid kenneling your pets with a bunch of other animals, pick up your own animal's feces outside, and avoid walking your dog where other animals have pooped. To the best of your ability, I recommend not letting your dog drink from puddles of water that are outside. Any source of outdoor contaminated water is a potential source for giardia. Most importantly, check a fecal sample through your vet's diagnostic lab twice a year to identify and remove parasites before they can cause a tremendous amount of GI inflammation.

On one side note, I don't recommend routine deworming for dogs ever. There isn't one universal dewormer that kills all parasites, meaning that there isn't one dewormer that would get rid of giardia, coccidia, and tapeworm with all one pill. I don't recommend assuming that your pet has these parasites and offering unnecessary medications.

I also don't recommend using natural dewormers periodically to get rid of parasites that your pet may not even have. I have seen all too often at my practice many cases of really significant GI inflammation from unnecessary doses of strong herbal preparations that are totally unnecessary, because the dog doesn't have parasites in the first place.

I do recommend routinely and proactively testing your dog's or cat's poop to make sure that the pet is truly parasite-negative, versus giving any medication that simply isn't necessary.