

Giardiasis

We see a lot of new puppies with diarrhoea. Common things are common so if it's not resolving with symptomatic treatment e.g. highly digestible diet and probiotics, we would recommend sending faecal samples off to an external lab for analysis.

What is Giardia?

One of the things we test for is a microscopic protozoan called Giardia, which can cause stomach upsets in people too. It is a simple one-celled parasitic species, not a worm, bacteria, or virus. Giardiasis occurs worldwide and is commonly known as “traveller’s diarrhoea” in people. Other examples of protozoan parasites that can cause enteric (intestinal) disease are *Coccidia*, *Cryptosporidia*, and *Toxoplasma*.

The Giardia organism has two forms. A fragile feeding form, the trophozoite, which exists in the gut of infected animals and feeds off their host absorbing their nutrients. A hardy cystic form is shed in faeces and can survive several months in the environment.

Giardiasis can be a significant cause of illness, especially diarrhea, in animals and people. However, most dogs infected with *Giardia* do not have diarrhea, vomiting, or any other signs of illness. The dogs at risk are the young and immunocompromised.



How does a dog get Giardiasis?

A dog becomes infected with Giardia when it swallows the cysts from infected water or even sniffing contaminated soil. Once the cyst passes into the dog's intestines, it transforms into the trophozoite and attaches to the intestinal wall to feed. If sufficient numbers are present, damage to the intestinal wall occurs and clinical signs develop.

Trophozoites reproduce by dividing, and some transform into the cystic form. Eventually, the dog passes these infectious cysts in its stools, ready to infect the next animal.

When Giardia cysts are found in the stool of a healthy adult dog without diarrhoea, they are generally an insignificant finding. However, in puppies or debilitated dogs, they may cause severe diarrhoea. The likelihood of developing disease increases when large numbers of cysts are present in the environment from faecal contamination. Giardiasis is common in densely populated environments, such as kennels or animal shelters.



Clinical Signs of Giardiasis

Giardia causes acute, sudden onset of foul-smelling diarrhoea. It may lead on to weight loss, chronic intermittent diarrhoea and fatty stools.

The stools may range from soft to watery, often with a greenish tinge, and occasionally blood and mucus.

Diarrhea may be intermittent. Most dogs do not have a fever but may be less active. The disease is not usually life-threatening unless the dog's immune system is immature or immunocompromised. Many dogs will be asymptomatic carriers, never developing any signs of illness. Younger animals are more likely to exhibit clinical signs.

Diagnosis

Some cases of diarrhoea are diagnosed and treated presumptively based on the history and clinical signs suggestive of giardiasis.

For diagnosis, 3 faecal samples are collected, pooled together and sent off to an external laboratory. The tiny cysts are shed inconsistently and may be failed to be detected on routine faecal flotation tests. Sometimes the parasites can be seen on a direct smear of the faeces.

At the lab, stool samples are analysed for *Giardia*-specific antigens (cell proteins).



Treatment

The most commonly drugs used are fenbendazole and metronidazole, usually for up to 10 days. Both drugs may be given in combination if necessary in refractory cases.

A low-residue, highly digestible diet, such as Hills I/d, and probiotics may help lessen loose stools during treatment.

If the puppy is dehydrated or the diarrhoea is severe, supportive treatment and intravenous fluids may be required.

It is recommended to re-test faecal samples after completion of the treatment course to check that the medication has been successful. Some dogs may require follow-up tests and treatments based on their condition and severity of infection.

Reinfection can occur, so faeces should be removed and disposed of quickly, dogs should be bathed to remove cysts from their coat and a buster collar used to prevent licking. If treated efficiently, the prognosis is good!

To book in for your pet in for a health check please call us on 01423 228080 or visit www.clarohillvets.co.uk