



Giardiasis

UC DAVIS SCHOOL OF VETERINARY MEDICINE

Disease name:	Giardiasis			
Agent:	<i>Giardia duodenalis</i> (syn. <i>G. intestinalis</i> , <i>G. lamblia</i>)			
Infective forms:	Exists as intestinal trophozoite form and as an infective cyst.			
Susceptible domestic species:	Cats, dogs, and most domestic species			
Zoonotic?:	No			
Diagnostic tests:	Direct smear	Zinc flotation with centrifugation	Flotation without centrifugation	Idexx ELISA SNAP test
Test sensitivity (likelihood test will correctly ID truly infected animals)	~ 50% on diarrhetic feces	~75% on 3 samples over 5 days	Poor (probably <10%)	85-90%
Test specificity (likelihood test will correctly ID those NOT infected)	Must distinguish from <i>T. foetus</i> in cats	Good, if able to distinguish from coccidia, yeast etc.		95-99%
Test comments:	Must be fresh sample	Cyst shedding is intermittent – must sample repeatedly	Test is essentially not recommended for giardia	Can test + for up to 2 weeks following successful treatment
Other tests:	There are several other tests available from laboratories. The ProspectT microplate ELISA and FA tests are good; please call your lab for details on the tests and on their specificities/sensitivities. (The ProspectT RAPID assay is less sensitive).			
Prevalence in shelters:	Cats: 10-30% (up to 100% in some catteries) Dogs: 20-40% (up to 100% in some kennels)			
Vaccine available?	Yes, however it is not recommended as it has not been proven to be effective.			
Excreted in:	feces			
Mode of transmission:	Fecal-oral either directly or indirectly via e.g. fecal contaminated water or food.			
Disinfection:	Cysts can exist for months in a moist/cool environment. Quaternary ammonium-containing disinfectants are effective at room temperature. Drying of kennels also helps in between disinfection.			
Incubation:	Average prepatent period is 8 days in dogs, 10 days in cats. Onset of disease (if it occurs) may precede cyst shedding by 1-2 days.			
Post-recovery shedding:	Shedding may still occur even after disease is treated. It is advisable to retest animal at the end of treatment and then again several weeks later.			
Carrier state?:	YES. Most infections in otherwise healthy adult animals are asymptomatic. Self cure is possible as is chronic shedding.			
Treatment and prevention of outbreaks:	Fenbendazole (panacur) : Febental/pyrantel/praziquantel (Drontal Plus) Metronidazole (less effective and resistance is possible). Reinfection is common so decontamination of the environment in shelters is paramount. Bathing can also help decrease cyst load found on fur.			