



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 diarrheic 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:	<p>Fenbendazole (panacur) 50mg/kg q 24 hrs x 3 days</p> <p>Febental/pyrantel/praziquantel (Drontal Plus) 56.5mg febentel /cat q 24 hrs x 5 days.</p> <p>Metronidazole 20mg/kg q 12 hrs x 5-7 days (less effective and resistance is possible).</p> <p>Reinfection is common so decontamination of the environment in shelters is paramount. Bathing can also help decrease cyst load found on fur.</p>			