

# capsules

## THE CURRENT LITERATURE IN BRIEF

### Is It Really *Giardia*?

This report is based on a series of investigations that evaluated different *Giardia* testing methods. The authors believe that *Giardia* is one of the most commonly misdiagnosed parasites. For example, pseudoparasites, such as yeast and plant remnants, in fecal samples are sometimes mistaken for *Giardia* cysts. Cysts are shed intermittently, and repeated sampling may be necessary to recover them. The cysts are also very delicate and deteriorate in fecal flotation solutions. Trophozoites may be seen in fecal smears, but they too are fragile and often found only in very fresh diarrhea. In this article, diagnosis of *Giardia* was evaluated using routine methods and a fecal antigen test (SNAP *Giardia* Test Kit, Idexx Laboratories). Feces were collected from naturally infected dogs. In the first analysis, samples were evaluated with a swing-head centrifugation technique using 1.18 SG ZnSO<sub>4</sub> solution and with the fecal antigen test. These samples were evaluated by a technician with more than 14 years of experience in examining fecal samples. Another evaluation of the fecal antigen test was conducted by second-year veterinary students who examined fecal samples from 116 puppies. Each sample was evaluated by a direct smear, centrifugation, and the SNAP *Giardia* Test Kit. A final evaluation was conducted in a “wet lab” conducted during a veterinary conference. Samples were evaluated using a commercial passive flotation test, a swing-head centrifugation technique (using either ZnSO<sub>4</sub> or a Sheather’s sugar solution), and the fecal antigen test. The ZnSO<sub>4</sub> centrifugation technique was very accurate when done by a well-trained technician. In the other situations, the ability to find and recognize *Giardia* cysts was not as good. The use of the SNAP *Giardia* test can improve recognition of *Giardia*-infected dogs.

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COMMENTARY: As the authors state, diagnosis of *Giardia* is difficult for most clinics. The availability of an antigen test will greatly increase the accuracy of diagnosis. In some early survey work reported in 2005, the prevalence of *Giardia* antigens was more than 18% in symptomatic dogs and more than 10% in symptomatic cats.—*The Editors*

Accurate diagnosis of *Giardia* spp and proper fecal examination procedures. Dryden MW, Payne PA, Smith V. *VET THER* 7:4-14, 2006.