

capsules

THE CURRENT LITERATURE IN BRIEF

Treating Giardiasis in Kittens

The flagellate parasite *Giardia lamblia* can infect a wide variety of mammals and causes significant gastrointestinal disease. The most common treatments for giardiasis in dogs and cats have included albendazole, metronidazole, and fenbendazole. Albendazole and fenbendazole have had variable effectiveness in stopping the shedding of *Giardia* cysts in kittens. Metronidazole, while shown to be effective in eliminating cyst shedding, has also been associated with gastrointestinal and central nervous system toxicity in some kittens and dogs. In this study, combinations of febantel, pyrantel, and praziquantel (FPP) were evaluated for treatment of giardiasis in 24 twelve-week-old kittens of both sexes experimentally inoculated with *Giardia* species. The authors tested 3 formulations of FPP at the following doses: 1) 37.8 mg/kg, 7.56 mg/kg, and 7.56 mg/kg, respectively, PO, Q 24 H, for 5 days; 2) 12.5 mg/kg, 12 mg/kg, and 4.16 mg/kg, respectively, PO, Q 24 H, for 5 days; and 3) 56.5 mg/kg, 11.3 mg/kg, and 11.3 mg/kg, respectively, PO, Q 24 H, for 5 days. Three sequential experiments were performed using these combinations of FPP. Thirteen days after treatment, kittens that tested negative for *Giardia* species cysts were given 20 mg/kg methylprednisolone acetate IM weekly for a maximum of 2 injections and tested for shedding. In kittens that developed detectable infections after inoculation, chronic, persistent shedding of *Giardia* species cysts occurred. In the 7- to 14- day pretreatment periods of the 3 experiments, no difference was found between treated and control groups in *Giardia* cyst shedding. During the intra- and post treatment periods of each experiment, however, treated kittens had significantly fewer positive fecal samples than controls. In addition, kittens treated with the highest dose of FPP showed the best intra- and post treatment results, including failure to detect cyst shedding in 4 of the 6 treated kittens after administration of methylprednisolone acetate. The authors also noted that the FPP formulations were well-tolerated; transient salivation was the only side effect seen. In addition, complete blood count and serum biochemistry results were normal after the 3 experiments. The authors, however, could not determine whether FPP decreased clinical signs of giardiasis because few of the kittens in the study actually exhibited diarrhea. Study supported by Bayer Animal Health

COMMENTARY: Giardiasis can be difficult to diagnose; misdiagnosis and underdiagnosis are not uncommon. Infection rates in some areas are estimated to be 50% in dogs and 40% in cats. Once an animal is infected, shedding of cysts can occur within 5 to 7 days and the cysts are immediately infective, acting as a source for reinfection of the pet or a potential source for infection of other household pets. Zoonotic transmission is probably rare but is still a concern. There are no drugs approved in the United States for treatment of giardiasis, but those that are commonly used and their potential drawbacks are noted in this article. As described in this study, it appears that adding certain drugs to the practitioner's arsenal can be both safe and efficacious in eliminating shedding of *Giardia* cysts in kittens.—Jennifer Schori, VMD

Efficacy of a combination of febantel, pyrantel, and praziquantel for the treatment of kittens experimentally infected with Giardia species. Scorza AP, Radecki SV, Lappin MR. J FELINE MED SURG 8:7-13, 2006.