## Treating T. Foetus Diarrhea in Cats

*Tritrichomonas foetus* typically affects cattle as a venereal pathogen. Recently, it has been recognized as a pathogen that causes colitis in domestic cats. The infection is most likely spread by the fecal-oral route. Dense housing is a risk factor, and the infection has become widespread in catteries. In a study of 117 cats from 89 catteries at an international cat show, *T. foetus* was found in 36 cats representing 28 catteries. No effective treatment has been found. Some cats have persistent diarrhea for up to 2 years, and some may remain infected for life. The authors of this article tested ronidazole (RDZ), tinidazole, and metronidazole against the parasite in vitro and RDZ alone for the treatment of naturally occurring disease and experimentally induced



Photo by Elizabeth Harbin

infections. The one case of naturally occurring disease was found in a 3-year-old, spayed female Persian cat that since 6 months of age had unrelenting large bowel diarrhea. Infection with T. foetus had been confirmed by direct microscopy, microbial culture for trichomonads, and single-tube nested PCR testing. The cat had been treated with a variety of antimicrobials. It was given 10 mg/kg RDZ by mouth daily for 10 days. Within 24 hours of initiation of treatment, trichomonads were no longer visible by direct examination of the feces. Fecal consistency improved dramatically. Feces remained formed and tested negative for *T. foetus* infection by culture and polymerase chain reaction assay on days 15 and 31.0n day 85, there was an acute onset of large bowel diarrhea with blood and mucus. Another 10 days of treatment with RDZ was initiated. Immediate resolution of diarrhea

and fecal shedding of the trichomonads was observed. The cat tested negative on days 22, 37, and 407. The findings suggest that RDZ at 30 to 50 mg/kg twice a day by mouth resulted in long-term elimination of *T. foetus* infection and diarrhea. Periods between relapse were often prolonged.

**COMMENTARY:** Chronic large bowel diarrhea in cats can be one of the most frustrating challenges in veterinary gastroenterology. Known causes include dietary sensitivity; inflammatory bowel disease; colonic lymphosarcoma and other tumors; and infection with *Salmonella* species, *Clostridium* species, and possibly *Campylobacter* species. Other bacteria and chronic viral infections (FIV, FIP, and FeLV) can also be associated with large bowel signs. Parasite infection, including *Ancylostoma* and *Giardia* (yes, they can cause large bowel signs) and *Cryptosporidium* species, should also be considered. Infection with *T. foetus* has emerged as an important and arguably one of the most frustrating causes of chronic diarrhea in cats because of difficulties inherent in diagnosis and lack of effective treatment. *T. foetus* is a flagellated protozoan parasite that resides in the colon of domestic cats and causes colitis and chronic, foul-smelling diarrhea. Ronidazole is related to metronidazole and is effective in eliminating the organism and resolving diarrhea at a dose of 30 to 50 mg/kg PO Q 12 H for 14 days. The drug is not currently licensed for human or veterinary use, but the chemical grade compound is available from Sigma. —*Colin F. Burrows, BVetMed, PhD, MRCVS, Diplomate ACVIM* 

Efficacy of ronidazole for treatment of feline *Tritrichomonas foetus* infection. Gooking JL, Copple CN, Papich MG, et al. **J VET INTERN MED** 20:536-543, 2006.

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