PCR Identifies “Candidatus Mycoplasma haemominutum”

A search for all client-owned cats that had blood samples tested for the presence of hemoplasma species infection between January 2001 and June 2004 was conducted on the database at the diagnostic laboratory at Colorado State University. Records for 21 clinically ill cats that tested positive for DNA of “Candidatus Mycoplasma haemominutum” in their blood were reviewed. Results of the study suggest that this hemoplasma species can be a primary pathogen in cats, and cats positive for “Candidatus Mycoplasma haemominutum” in polymerase chain reaction assays in addition to fever or anemia should be treated with an antihemoplasma drug, regardless of the presence or absence of an obvious concurrent disease. The most common abnormal clinical signs noted were fever, anorexia, lethargy, and anemia. Of the 21 cats, 13 were anemic. For 6 of these, “Candidatus Mycoplasma haemominutum” was the only recognizable cause of the anemia. Mycoplasma haemofelis, “Candidatus Mycoplasma haemominutum,” and “Candidatus Mycoplasma turicensis,” formerly known as Haemobartonella felis, are gram-negative, episcopal parasites of feline erythrocytes that can result in hemoplasmosis in some infected cats. Different strains may vary in pathogenicity and there is a potential for concurrent disease to activate hemoplasmosis.

COMMENTARY: Even before it was renamed, identification of this organism was difficult, which may account for its not being recognized as a primary disease. Commercially available polymerase chain reaction testing may change that and help us better understand the organism. Further studies need to be conducted to determine the best therapeutic options for infected cats. —The Editors


Urinary Obstruction in Male Cats

A study was conducted to evaluate the outcome of urethral obstruction in cats. Forty-five male cats with this diagnosis were admitted to the Clinic for Small Animal Internal Medicine, University of Zurich, between December 2000 and November 2002. Cats were defined as obstructed and included in the study if they could not void urine freely, if calculi were detected in the urethra, or if obvious resistance was experienced with catheterization. Idiopathic urethral obstruction was diagnosed in 24 cats (53%) because no specific cause of the clinical signs could be identified. Thirteen cats (29%) had uroliths, as diagnosed by radiography, ultrasonography, or cystotomy. Eight cats (18%) presented with urethral plugs, diagnosed during urethral catheterization or via urethroscopy. Within the idiopathic group, median durations of hospitalization and indwelling catheterization were 4.5 and 2 days, respectively. After discharge from the hospital, 22 cats had follow-up information, and obstruction recurred in 8 (36%) of these cats. In the urolith group, 6 had calcium oxalate uroliths, 2 had struvite, and 5 had uroliths of undetermined type. Median duration of hospitalization was 6 days, and among the 10 cats that were ultimately discharged, obstruction recurred in 3 (30%) of these cats. In the urethral plug group, median durations of hospitalization and indwelling catheterization were 4.5 and 2 days, respectively. All 8 were discharged, and obstruction recurred in 3 (43%). Hospitalization and indwelling catheter durations, as well as rate of reobstruction, did not significantly differ between the groups. Of the cats with urethral obstruction for which information was available, 26% died or were euthanized because of their disease. Recurrent obstruction was the most common reason for euthanasia.

COMMENTARY: Fortunately, the rate of urethral obstruction in cats has declined in recent years; unfortunately, this study found that the rate of reobstruction was not any less than it was in a study done 25 years ago. Recommendations for increasing water consumption, increasing the number of litter boxes, and providing resting areas and social contacts were not routinely discussed with the owners of these cats, but this may have helped in some of the cases. The indoor cat initiative (www.vet.ohio-state.edu/indoorcat) provides more helpful information. —Patricia Thomblison, DVM, MS


Photo by Elizabeth Harbin