Stray Cats & Bartonella

Cat scratch disease (CSD) is an important zoonotic disease caused by *Bartonella henselae*. Cats become infected from exposure to infected fleas, and humans become infected when wounds, scratches, or other injuries are exposed to contaminated flea feces. Veterinarians are considered an at-risk population. The first human case of CSD was diagnosed in Taiwan in 1998, and a reference laboratory was established in 2001. In 2002, 295 blood or serum samples were collected from veterinarians, veterinary students, or veterinary technicians from Taiwan to determine the seropositivity of this population. In addition, 131 cats (30 pet cats, 37 breeding cats, 64 stray cats) were also screened. Human and cat blood was screened for *Bartonella* by using polymerase chain reaction. Isolation of *Bartonella* species from cat blood was attempted on chocolate agar plates. In the veterinary-associated samples, only 1.7% were seropositive. The prevalence rates of seropositivity and bacteremia in cats were 23.7% and 19.1%, respectively. In addition, 9.2% of cats were infected with 2 genotypes of *Bartonella*. Stray cats had the highest seropositivity, followed by pet cats. None of the cats from the breeding facility were seropositive; strict flea control was practiced.

COMMENTARY: The absence of seropositivity in breeding cats receiving strict ectoparasite control is interesting. The finding that stray cats had the highest seropositivity is not surprising and is yet another argument for control of free-ranging cats. CSD is a zoonotic disease; children are one of the most commonly affected populations. It is also important to note that seroprevalence of *Bartonella* species is associated with climatic factors; studies consistently show that it is most common in warm, humid climates. Given the warmer winters occurring in many regions of the United States, a strong argument can be made for year-round flea control for all pets.—The Editors


The Cyclosporine + Ketoconazole Combo

An 8-year-old male collie dog with a presumptive diagnosis of immune-mediated disease was referred for consultation because of inadequate response to glucocorticoid therapy and weakness. Additional diagnostics, including skin biopsy, antinuclear antibody testing, and electromyography, were conducted. A definitive diagnosis of vesicular cutaneous lupus erythematosus was made, and the dog was treated with a combination of antibiotics, azathioprine, and prednisolone. New lesions continued to develop, and therapy was changed to oral prednisone, ketoconazole, and oral cyclosporine. The dog markedly improved within 12 days; after 2.5 months, the lesions had resolved and the dog was considered normal. The dog was followed for 18 months; after 15 months of remission, ketoconazole therapy was discontinued and cyclosporine therapy (2 mg/kg Q 24 H) was continued.

COMMENTARY: Vesicular cutaneous lupus erythematosus is believed to be a variant of lupus erythematosus and has been described in rough collie dogs and Shetland sheepdogs. Some dogs also have a concurrent myositis, and there may be a relationship to dermatomyositis. Treatment of the condition is difficult, and the disease has been reported to only partially respond to steroids.¹ There have been anecdotal reports that cyclosporine is effective as treatment, but this is one of the first well-documented cases with substantial follow-up. In this patient, initial therapy included oral antibiotics for secondary infections. Remission was induced by using a combination of oral prednisone, 0.2 mg/kg Q 12 H; ketoconazole, 4 mg/kg Q 24 H; and oral cyclosporine, 4 mg/kg Q 24 H. Ketoconazole slows the metabolism of cyclosporine, allowing use of lower doses. It is important to note that even though a rapid response was seen, the authors gradually decreased therapy over months; owners need to know that treatment is most likely to be lifelong.—Karen A. Moriello, DVM, Diplomate ACVD
