Chronic Corneal Diseases

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Dogs with keratoconjunctivitis sicca (KCS) often present with a mucoid-to-mucopurulent discharge. The dogs may rub their eyes, have blepharospasm, or have an elevated 3rd eyelid. If the cornea doesn't appear dry, a Schirmer’s test should be done. Less than 10 mm/min is highly suggestive of KCS. Immune-mediated disorders are believed to be the most common cause of KCS in dogs, but KCS may be secondary to drug therapy with atropine, phenazopyridine, sulfas, or etodolac. Treatment can include artificial tears, but artificial tears lack many of the constituents of normal tears and may compromise the nutrition of the cornea. Cyclosporine A has a direct antiinflammatory effect on the lacrimal glands and an indirect neurohormonal effect. There is a veterinary-approved commercial preparation that minimizes the amount of drug needed to achieve optimal clinical effects. Secondary bacterial infections should also be treated. Topical antibiotics are used when the discharge is purulent instead of mucoid.

Chronic superficial keratitis is common in German shepherds, Belgian shepherds, shepherd crosses, and greyhounds. Increased sunlight exposure and altitude contribute to earlier clinical disease. Corticosteroids and cyclosporine are used to manage these cases. Feline ocular herpes with or without corneal ulcers can be frustrating to diagnose and treat. The clinical signs may be mild to severe. Topical antibiotics may be helpful for mild cases; more severe cases should be treated with topical antivirals. Oral L-lysine (which can be purchased from health food stores, ground, and added to canned cat food) has been reported to be helpful in preventing further outbreaks of feline herpesvirus. A disease that is seen only in cats is proliferative eosinophilic keratitis. A focal plaque may be present, or the entire cornea may be involved. The eye responds dramatically to topical steroid therapy, but steroids may trigger an acute herpes outbreak if the cat is a carrier. Cyclosporine may be useful for management after steroids have been used.

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COMMENTARY: There are many causes of corneal disease in dogs and cats, and treatments often include antiinflammatory or immunosuppressive drugs. L-lysine, reported as helpful in preventing outbreaks of herpesvirus, will soon be available from Vetoquinol through veterinary distributors in a dosing syringe. As the author points out, commercial preparations that have FDA approval are best for topical applications. Compounded products may be irritating and cause corneal damage or support bacterial growth.—Patricia Thomblison, DVM, MS