FELINE GLAUCOMA: MORE PROBLEMATIC THAN CANINE GLAUCOMA
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The incidence of glaucoma in cats is much lower than dogs, and the clinical signs are not as obvious. Buphthalmia is present in chronic cases, but extremely buphthalmic globes may still be visual. Cats also develop much less corneal edema and episcleral injection than dogs even with IOP as high as 60mmhg.

Primary glaucoma is usually bilateral and has been reported in Siamese, Persian, and domestic shorthair cats. These individuals are usually presented with buphthalmia, subluxated lens, and decreased vision. Congenital open and closed angle glaucoma is also seen as a bilateral disease with multiple ocular defects, primarily in the DSH.

Feline aqueous humor misdirection syndrome (FAHMS) is a unique form of glaucoma seen in cats at an average age of 11.7 years. The reported incidence is greater in females and in my practice Persians are overrepresented. The affected globe has a dilated pupil with a sluggish PLR, resulting in an anisocoria. The anterior chamber is extremely shallow. Frequently, an anterior capsule or cortical cataract is present. As in most cases of glaucoma in cats, corneal edema and episcleral injection are not present. Optic disc atrophy may be present but is difficult to detect in cats. A membrane develops posterior to the iris, preventing the normal flow of aqueous anteriorly, resulting in the anterior displacement of the iris and lens. The inciting etiology is unknown.

Secondary glaucoma is most frequently due to severe anterior uveitis. Diffuse iris melanomas in cats are a common cause of glaucoma. These cases may be presented with a dark brown iris, an irregular pupil, pigment on the anterior lens capsule, and a buphthalmic globe.

Cats with primary glaucoma are treated similarly to dogs, but they have less tolerance to drugs. Dichlorphenamide is used at a total dose of 12.5 to 25mg s.i.d. to b.i.d. Side effects include acidosis, lethargy, loss of appetite, and weakness. Sodium replacement is frequently indicated in cats. Two topical CAI, 2% dorzolamide (Trusopt®) and brinzolamide (Azopt®), have been used in cats t.i.d. Both drugs have been well tolerated with a good clinical response. Pilocarpine 1% and demecarium bromide (Wedgewood Pharmacy, 800-331-8272) are also used s.i.d. to b.i.d. but may cause local irritation and diarrhea. It has been suggested that the beta-adrenergic blocker (Timoptic® 0.5%), is more effective in cats than dogs. Latanoprost (Xalatan®) and similar prostaglandins should not be used in cases of FAHMS or most secondary glaucoma.

Secondary glaucoma is treated similar to that in dogs; i.e., treat as in anterior uveitis. Intraocular pressures should be monitored. As inflammation improves, the IOP should decrease. Identification of the primary cause of anterior uveitis (FeLV, FIP, T. Gondi, Bartonella) must be attempted.