



# COMMON SMALL ANIMAL UVEAL DISEASES

■ Douglas Esson, DAVCO

The uveal tract is composed of anterior (iris & ciliary body) and posterior (choroidal) tissues. These tissues contain components of the “blood-ocular barrier” which regulates the passage of protein into the aqueous humor. Relatively common clinical presentations associated with uveal tissues encompass infectious, inflammatory, metabolic & neoplastic disease.

**Uveal cysts** (“iris cysts”) may arise from the posterior iridal or ciliary body epithelium, commonly affecting the Labrador Retriever, Golden Retriever, Boston Terrier, Great Dane & American Bulldog. Most uveal cysts are benign and do not require treatment. Additionally, the presence of uveal cysts has been associated with elevated intraocular pressure in some breeds including the American Bulldog & Great Dane. Surgical intervention may be indicated in cases where cystic proliferation results in visual impairment and/or compromised aqueous outflow.

The term **uveitis** describes inflammation of any of the uveal tissues and is typically associated with variable breakdown of the blood-ocular barrier. Bilateral uveitis should prompt concern for the presence of systemic disease. Potential etiologies include hereditary factors, lens-associated inflammation, trauma, systemic disease, exposure to infectious organisms and/or the presence of (local or systemic) neoplasia. Infectious etiologies which may be associated with the development of anterior uveitis in cats include; viral (FeIV, FIV, FIP, FHV), protozoal (*Toxoplasma gondii*), bacterial (notably *Bartonella* spp) and fungal (*Cryptococcus*, *Coccidiomycosis*, *Aspergillus*, *Blastomyces* & *Histoplasmosis*) organisms. Infectious etiologies which may be associated with the development of anterior uveitis in dogs include; viral (canine adenovirus-1 & canine parvovirus), protozoal (*Toxoplasma gondii*), bacterial (notably *Ehrlichia canis*, *Rickettsia rickettsia*, *Leptospira* spp & *Borellia* spp) and fungal (*Coccidiomycosis*, *Aspergillus*, *Blastomyces* & *Histoplasmosis*) organisms. Frustratingly, the etiology of uveitis remains unclear in a significant proportion of cases. Treatment encompasses addressing underlying systemic, infectious or neoplastic disease, as well as the administration of topical and/or systemic anti-inflammatory therapy. Long-term treatment may be indicated in order to minimize the risk of secondary glaucoma.

A syndrome comprising slowly progressive intraocular changes, typically culminating in secondary glaucoma, is well recognized within the Golden Retriever breed. This syndrome has been variably described as “Pigmentary Uveitis”, “**Golden Retriever Uveitis**” and “Pigmentary & Cystic Glaucoma of Golden Retrievers”. Initial symptoms (comprising ocular redness, anterior pigment dispersion, cataract formation and/or IOP elevation) are frequently noted around middle age and are usually bilateral, although not



Anterior uveitis



Aqueous lipidosis