



Summer 2010  
Newsletter

Welcome to the Eye Vet newsletter.  
Eye Vet is a veterinary ophthalmology referral service run by Natasha Mitchell MVB CertVOphthal MRCVS through Crescent Veterinary Clinic, Dooradoyle Road, Limerick.

This newsletter is produced quarterly, and is also available online at [www.eyevet.ie](http://www.eyevet.ie)

Next Newsletter...

The next newsletter will be a special feline edition.

## Examination Technique

Recognising contents of the anterior chamber, many of which indicate uveitis.

**Uveitis** is inflammation of the iris, ciliary body and/or choroid, and it causes break-down of the blood-aqueous barrier. It is an important differential for a red eye.



**Aqueous flare** – protein leaking into the anterior chamber from breakdown of the blood-aqueous barrier produces a hazy light-scattering effect, most easily seen with a slit beam of light.



**Keratic precipitates** – mutton fat deposits on the posterior aspect of the ventral cornea, pathognomonic for uveitis.



**Hypopyon** – accumulation of white blood cells in a boat shape at the bottom of the anterior chamber, which may be septic or sterile, and is most often associated with uveitis.



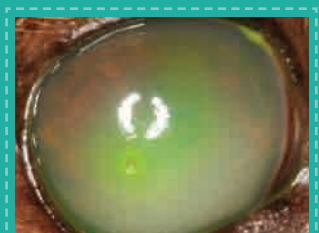
**Hyphaema** – accumulation of red blood cells, caused by trauma to or inflammation of the uveal tract; retinal detachment; systemic hypertension; clotting disorders; immune-mediated disease; chronic glaucoma or neoplasia.



**Fibrin** – This is a white insoluble protein formed by the coagulation cascade. It often is mixed with haemorrhage as it forms a mesh to trap red blood cells and create a clot.



**Lipaemic aqueous** – white opacity due to triglycerides within the aqueous which gain access with uveitis: indicating systemic hyperlipidaemia which may be dietary; or else secondary to a metabolic disease such as diabetes, Cushings, pancreatitis, or liver disease.



## Clinical Case

A four year old male entire Chesapeake Bay retriever presented with a three day history of a red right eye.

## Clinical Examination

Both eyes had normal menace responses and dazzle reflexes. In the right eye the PLR was very slight. There were many keratic precipitates on the ventral aspect of the inner cornea, and there was aqueous flare. The anterior chamber was very shallow because the iris was thickened from the 8 o'clock position to the 4 o'clock position, and this made the pupil distorted (dyscoria). The intraocular pressures were 5mmHg in both eyes (low, normal is 10-25mmHg). There was no uptake of fluorescein stain by the cornea. Clinical examination was normal and there was no lymph node enlargement.

## Diagnosis

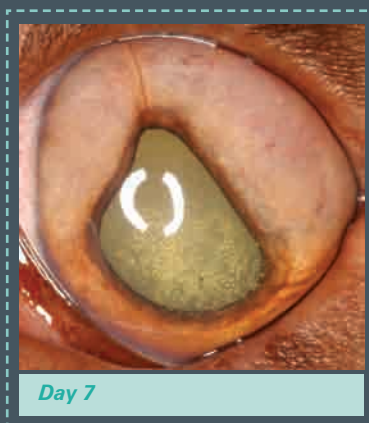
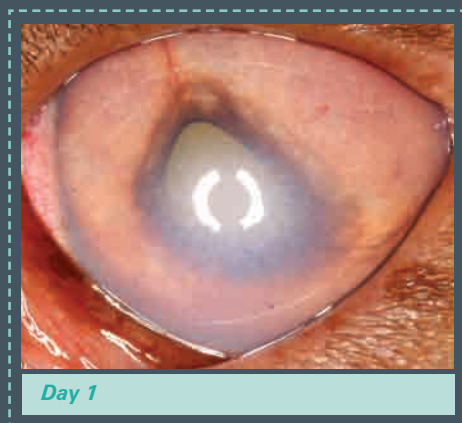
Uveitis with iris neoplasia, typical of lymphoma. The keratic precipitates in this case are actually neoplastic lymphocytes.

## Work-up

Ideally blood tests, lymph node biopsy and aspiration of aqueous from the right eye would be carried out. However after hearing the presumptive diagnosis of lymphoma with a poor prognosis (as it is a secondary tumour), the owner elected for palliative treatment for uveitis alone.

## Treatment

The uveitis improved with topical Pred forte 1% and Mydracyl 1%, each three times daily, along with oral carprofen. The thickened iris remains, as can be seen in the photo taken on day 7. The eye was comfortable and retained vision, with clearing of the aqueous flare and a slight reduction in the swelling of the iris. Glaucoma is always a risk with chronic uveitis, thus further monitoring is required. Chemotherapy was declined.



### Tip

Corneal ulceration causes reflex uveitis, through stimulation of sensory nerves. Therefore the pupil size should be examined in cases of corneal ulceration, and treatment with tropicamide (Mydracyl) along with a topical antibiotic will make the animal a lot more comfortable.

A folder to keep all of your Eye Vet newsletters together is available. To request one, please email [natasha@eyevet.ie](mailto:natasha@eyevet.ie)