

## **Uveitis**

The **Uvea** is the part of the eye which is richly vascularized and has the capability of acting like a lymph node. A lymph node reacts to infections and trauma in order to protect the local tissue – mainly by initiating inflammation. The eye is a very delicate structure where most types of inflammation may result in irreversible damage leading to cataract, glaucoma and retinal damage. Uveitis indicates inflammation of the uvea.

The main symptoms of uveitis include:

- A small pupil (miosis)
- Redness of the white of the eye (Episcleral congestion)
- Sensitivity to light (photosensitivity)
- Squinting (pain)
- Haziness of the cornea (corneal edema)
- Deposits on the inner aspect of the cornea (keratic precipitates)

Depending on the type of uveitis seen, various blood tests and imaging (x-rays, ultraonography or MR/CT) may be necessary to rule out/in systemic disease processes.

Particularly severe forms of uveitis include:

- Uveitic glaucoma – seen in any type of uveitis and also may be seen as part of VKH (Vogt-Koyanagi-Harada-like) syndrome.
- Steroid Responsive Retinal Detachment (Exudative) – an immune mediated disease most commonly seen in German Shepherd Dog (purebred or crosses). This disease is also known as “steroid responsive retinal detachment”.
- Secondary to lymphosarcoma (a type cancer in dogs, which often responds well to chemotherapy).

The most commonly used medications in the treatment of uveitis include: corticosteroids (to reduce and control inflammation), atropine (to dilate the pupil) and azathioprine (long term immunosuppressive).

The modes of corticosteroid drug delivery in uveitis include:

- Topical – most commonly Prednisolone acetate 1%
- Subconjunctival (triamcinolone acetate or methylprednisolone acetate)
- Peribulbar (triamcinolone acetate without preservative)
- Intraocular (in the vitreous) injection (triamcinolone without preservative)
- Systemic/oral medications (prednisone, dexamethasone)

The surgical options for uveitis include a *vitrectomy* to remove the vitreous. The vitreous is a gel (egg white-like) between the retina and the lens where antigen/antibodies may be present for long periods of time.