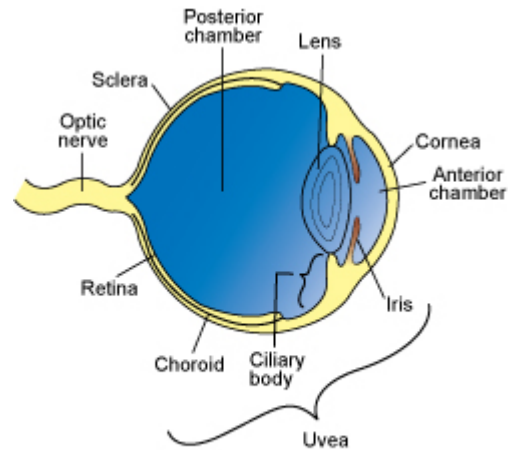


Uveitis in Dogs

The *uvea* is the part of the eye made up of the iris, the ciliary body and the choroid. The *choroid* is the middle layer or vascular tunic of the eye located between the *sclera*, which is the fibrous protective outer coat (the white of the eye) and the *retina*, which is the light sensitive surface within the eye.

The iris and the ciliary body together form the *anterior uveal tract*. The *iris* is the pigmented or colored membrane behind the *cornea* (clear outer surface of the eye). It is responsible for the color of the eye. The *ciliary body* is a thickened extension of the choroid and connects the choroid and the iris. The ciliary body produces a fluid called the aqueous humor that provides important nutrients to the eye and that maintains intra-ocular pressure (IOP). The ciliary body contains the suspensory ligament and ciliary muscles which support the lens and control its shape and hence its ability to focus images.

Uveitis is an inflammation of one or more of the structures making up the uvea. If all three structures are involved, ciliary body, iris and choroid, is the inflammation is called true uveitis or *pan-uveitis*. If only the ciliary body and the iris are inflamed it is called *iridocyclitis* or *anterior uveitis*, while inflammation of the choroid is *choroiditis* or *posterior uveitis*.



Used Under License
Copyright© Lifelearn Inc.

What causes uveitis?

There are many potential causes of uveitis. Sometimes the true cause is never discovered. Common causes are:

- Infection – viral, bacterial, parasitic or fungal
- Metabolic disease
- Diabetes mellitus
- High blood pressure
- Toxemia
- Immune mediated – particularly autoimmune disease where the dog produces antibodies against its own tissues
- Trauma to the eye
- Lens damage resulting in the leakage of lens protein, and tumors

What are the clinical signs of uveitis?

"The usual signs of uveitis are severe pain with an intense reddening of the visible parts of the eye."

The usual signs of uveitis are severe pain with an intense reddening of the visible parts of the eye. The eye is usually kept shut and most pets avoid bright lights. Cloudiness of the eye may be noticed. Sometimes there is bleeding into the eye. There may be excessive tearing.

How is uveitis diagnosed?

Many of the signs of uveitis are similar to glaucoma. With uveitis, intraocular pressure (IOP) is reduced (low) whereas with glaucoma it is elevated (high). Measurement of IOP is often performed to differentiate between the two conditions and is a simple, painless procedure. A complete and thorough physical examination of the pet must be performed since generalized illnesses can have uveitis as one of their signs. Often there is a color change of the iris, which may be permanent. Special diagnostic procedures such as ultrasound may be used to examine the eye.

What is the treatment of uveitis?

Treatment is initially aimed at reducing inflammation and providing pain relief. Treatment of uveitis due to trauma can involve repair of any corneal tears or removal of a foreign body in the eye. This may involve referral to a specialist. A combination of drops or ointments combined with tablets may be required.

In order to assess the initial response to treatment, your veterinarian will need to examine your dog frequently.



What is the prognosis of uveitis?

When properly treated, most cases of uveitis begin to improve within twenty-four hours. If the eye is very cloudy or if hemorrhage has occurred, this may take a few more days to clear.

Complications are more common after very severe or recurrent cases of uveitis. These can involve the development of *synechiae* and *glaucoma*. Synechiae are adhesions between the lens and the iris. Glaucoma is an increase in IOP. Both complications may need specialist treatment. **Severe uveitis can result in irreversible blindness.**

This client information sheet is based on material written by: Ernest Ward, DVM

© Copyright 2009 Lifelearn Inc. Used and/or modified with permission under license.