

# Glaucoma in Animals

## What is Glaucoma?

*An eye with Glaucoma*



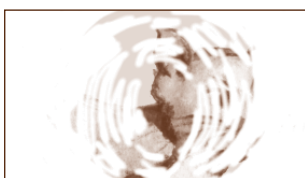
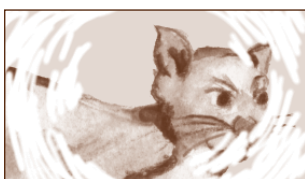
Glaucoma is a disease in both animals and humans which often causes blindness and is due to an increase in pressure in the eye. The pressure in the eye, intraocular pressure (IOP), can be measured and is normally between 15-25 mm of mercury.

In glaucoma, the pressure increases because of a failure of drainage of the fluid which is continuously produced inside the eye. The increased IOP can rapidly (within 24 hours) cause blindness, and also pain.

## What causes Glaucoma?



*(Normal)*



*These pictures illustrate how we think glaucoma affects an animal's sight.*

Glaucoma can be either primary or secondary. Primary glaucoma occurs in certain breeds with no obvious underlying problem, and is often inherited. Breeds such as *Basset Hounds*, *Cocker Spaniels*, *Australian Cattle Dogs*, *Fox Terriers*, *Poodles* and *Burmese cats* are breeds which may develop primary glaucoma.

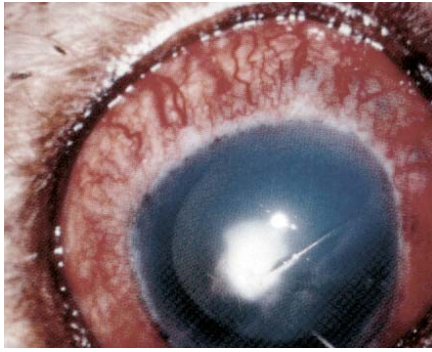
Secondary glaucoma is caused by some other problem, such as inflammation (*uveitis*), lens luxation, trauma, or cancer inside the eye. In these cases treatment of the underlying problem may help treat the glaucoma.

## What are the clinical signs of Glaucoma?

The usual presentation is a dog with a blind, painful, red eye with a blue or cloudy cornea. Unfortunately glaucoma can look like a simple "*conjunctivitis*", so if your pet has any of these signs please call your veterinarian, or eye specialist. Early detection of glaucoma may be difficult. In humans, in the early stages, there are often subtle vision problems. In animals these subtle vision problems are very hard to detect. Unfortunately many of the cases of glaucoma we see are well advanced by the time of the first visit.

## EARLY DETECTION IS IMPORTANT!

### What treatments are available for Glaucoma?



*An eye with Glaucoma*

Medical treatment with eye drops and oral drugs may successfully control the problem in the short term, or when the pressure increase is minimal. However long lasting control or a permanent solution usually requires surgery.

The type of surgery performed varies from case to case. As a general rule of thumb, if the eye still has potential for vision, then surgery to decrease the IOP is used. If the eye is irreversibly blind, we may recommend either a prosthesis in the eyeball itself, or eye removal.

The reason for this is that chronic glaucoma is painful.

Humans say that it is like having a migraine. Dogs and cats are often quite good at hiding their discomfort. It is often only when a glaucomatous blind eye is removed or has a prosthesis that the owners realise how painful it must have been, as the animal is rejuvenated, more active and alert.

We can't really prevent glaucoma, but we can minimise the effects of glaucoma, and prolong vision as long as possible if we start treatments early, or even prophylactically in some animals.

### Can we prevent Glaucoma?

In many cases of glaucoma in one eye, there is a reasonable chance that the normal eye may also be affected later on. Therefore we recommend regular rechecks (every 3-4 months) to monitor the IOP in the normal eye as well as monitoring the affected eye. We may even recommend that the normal eye is kept on lifelong prophylactic medications.

