

# Glaucoma

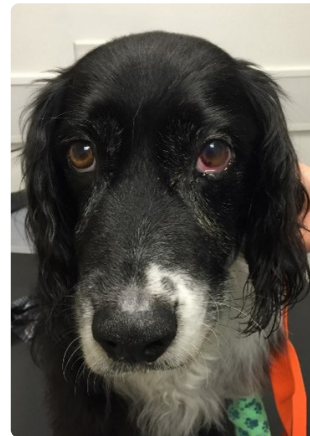


### What is glaucoma?

Glaucoma is caused by increased pressure inside the eye. This increased pressure can rapidly cause blindness and pain.

### Is glaucoma painful?

In humans, glaucoma feels like a migraine and is known to be uncomfortable. We suspect the same is true for our animal patients, especially because nearly all our patients are bright and happier once glaucoma is treated and the pressure inside the eye goes back to normal.



The same patient with acute glaucoma on the left – and 24 hours later after surgical treatment on the right. Acute glaucoma is very painful - which is well illustrated by seeing this patient before and after treatment.

### What can cause glaucoma?

Glaucoma in animals is caused by the fluid inside the eye not being able to drain out effectively. This has nothing to do with the tears and their drainage.

Think of a 'normal eye' like a sink and tap. Fluid continually enters the eye from a tap inside the eye and drains through a sink hole. If the drain is blocked fluid will build and cause a high pressure inside the eye that can damage the structures needed for vision.

Glaucoma can be primary or secondary:

- Primary glaucoma is when a dog is born with poor drainage inside the eye and with age and wear and tear the drain no longer works properly and pressure builds up. This will likely be a problem for both eyes in the dog's lifetime.
- Secondary glaucoma is when the drain is blocked by cells inside the eye. These can be blood, tumour or inflammatory cells. This usually only affects one eye. If there is any concern of a tumour we may recommend the eye to be removed.

## Is there a cure for glaucoma?

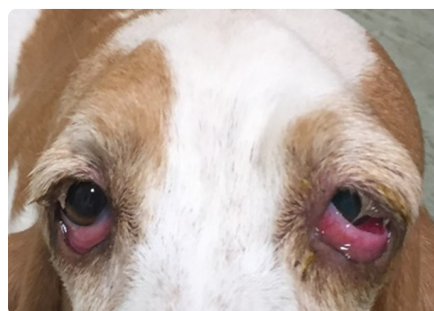
Once an eye has developed glaucoma there is no cure. Our treatment instead aims to keep the eye comfortable and sighted as long as possible. Sadly, most treatments fail eventually and at some point there will be an elevation of the pressure inside the eye that will cause an irreversible blindness even after medical and surgical treatment. If such an eye is not responding to treatment, has lost sight irreversibly and is causing pain due to uncontrolled pressure we would recommend surgical removal of eye. If your dog has glaucoma in one eye the other eye may be at risk. We can try to delay the onset of a high pressure in the second eye with eye drops and in some cases surgery (laser +/- shunts).

## How do I know if the pressure inside my dog's eye may be high?

The following are all possible signs of glaucoma you might notice in your dog:

- Redness of the white of the eye
- Blue, hazy eye
- Dilated pupil that will not become smaller when a bright light e.g. penlight, is shone into the eye
- Squinting
- Loss of vision
- Lethargy and depression

If you suspect the pressure is high this is an emergency and you must phone us – no matter the time of day.



An eye with chronic glaucoma on the left side. Note how the third eyelid is red and prolapsed across the eye.

This is a sign of pain. The cornea has become cloudy, there is redness and the pupil is wide – all these are signs of glaucoma. On the right is a Bassett with glaucoma in the left eye. The right eye has normal pressure but also appears red and droopy due the pain caused by the affected left eye.

## How can we treat glaucoma?

Initially, we can try and reduce the pressure inside the eye with eye drops. If the glaucoma happens very suddenly, we can release some of the fluid in the eye with a needle. This procedure is called a 'Paracentesis'. However, at some point the drops will no longer be effective and despite these medications the pressure inside the eye will continue to increase. If this is a concern and the eye still has sight, then surgical interventions can be considered.

There are two types of surgery – laser or a shunt, please see our "Glaucoma Surgery" factsheet for more details. If the eye is blind with an uncontrollable pressure removal of the eye will be advised.

