

Glaucoma in Dogs

Overview

- Glaucoma (high pressure inside the eye) is a very painful condition that often causes blindness, especially if it's left untreated.
- There are two main types of glaucoma in dogs; primary and secondary.
- Glaucoma can't be cured, but most cases can be well managed with eye drops and other medication.
- Eventually, even with treatment, most dogs with glaucoma lose their sight, but catching it early will help them keep their vision for as long as possible.
- Contact your vet straight immediately if your dog has symptoms of glaucoma.

General information

What is it? Glaucoma is high pressure inside the eye - a very painful problem that can cause blindness.

What causes it? Normally, fluid continually flows in and out of the eyes to deliver nutrients and keep them the right size, shape and pressure. Glaucoma develops when something stops that fluid from draining out, causing a build-up inside the eye.



Glaucoma in a dog's eye - image courtesy of Sheila Crispin

Types of glaucoma

Types of glaucoma include:

Primary glaucoma

Primary glaucoma is caused by a fault in the eye's drainage system and is nearly always hereditary (meaning it's passed down from parent to puppy). Primary glaucoma usually starts in one eye and over time usually progresses to both. There are two types of primary glaucoma:

- Closed angle glaucoma - usually develops very suddenly at around middle age.
- Open angle glaucoma - usually develops very slowly and later in life.

Both types of primary glaucoma are more common in certain breeds of dog (see below).

Secondary glaucoma

Secondary glaucoma is when another condition (such as cataracts, an eye injury, lens luxation, uveitis or a tumour in the eye) stops fluid draining and causes pressure inside the eye to increase. Secondary glaucoma can affect any breed of dog, at any point in their life, and can affect one or both eyes (depending on the cause).

Symptoms

Glaucoma can develop gradually or very suddenly, depending on the cause. It can affect one or both eyes and symptoms often include:

- [Severe eye pain](#)
 - Squinting
 - Avoiding bright light
 - Rubbing their face
 - Becoming head shy
- [Weepy eyes](#)
- Cloudy/blue eyes
- [Red, blood shot eyes](#)
- [Blindness](#)
- Wide or uneven pupils
- Bulging eyes

When to contact your vet

Contact your vet immediately if your dog has symptoms of glaucoma, or if they have been diagnosed and their symptoms are getting worse. Never wait to see if your dog improves, glaucoma is a very painful condition that left untreated, can quickly cause blindness.

Am I eligible for PDSA veterinary treatment?

Diagnosis

If your vet suspects your dog has glaucoma, they will confirm with an instrument called a 'tonometer'. A tonometer measures the pressure inside the eyes when it's gently touched on the surface. Normal pressure inside an eye is around 10-25mmHg.



Your dog may also need further tests to find the cause of the glaucoma (such as 'gonioscopy'), at which point, they may need to visit a specialist eye vet.

Treatment

Your vet will aim to bring down the pressure inside your dogs eyes as quickly as possible.

Emergency treatment. If your dog has a severe case of glaucoma, they may need rapid, emergency treatment. This is likely to involve staying at a veterinary hospital for anti-glaucoma medication (to reduce the pressure in their eyes), strong pain relief to keep them comfortable, and regular monitoring. Your vet may discuss referring your dog to a specialist eye vet for treatment if

necessary, especially if medical treatment doesn't reduce your dog's symptoms quickly enough.

Ongoing treatment. Once your dog's glaucoma has been stabilised, they will need to stay on anti-glaucoma medication to keep their eye pressure under control. This usually involves a number of different eye drops, several times a day. They will also need regular check-ups and medication reviews at the vets. It's important that your dog gets all their drops at the right time so you might find our [medication timetable](#) helpful.



[Watch our video: How to give eye drops to your dog.](#)

Eye removal: If your dog's glaucoma isn't responding to treatment and causing them a lot of pain your vet may recommend [enucleation \(removing their eye\)](#). Many owners struggle with the idea of having their dog's eye removed, but if they aren't responding to treatment it's often the kindest option because it prevents any further pain. Fortunately, many dogs cope really well after an enucleation, because they have usually gone gradually blind before their surgery.



Outlook

The outlook for a dog with glaucoma depends on the cause.

Primary glaucoma: If your dog has primary glaucoma, their eyes are likely to respond well to medication at the start. However, at some point (usually after a few months to years), they may stop responding, at which point, it will be necessary to speak to your vet and decide on a treatment plan. If your dog's pain is uncontrollable, [eye removal](#) may be the kindest option, especially if they are already blind in the eye. Sadly, most dogs with primary glaucoma end up losing sight in both their eyes.

Secondary glaucoma: If your dog has secondary glaucoma, their outlook will depend on what's causing it, and how well they respond to the treatment.

Cost

Glaucoma is often a very expensive condition to manage, anti-glaucoma medications can cost a lot and are usually for for life. It's important to speak to your vet openly about your finances, the cost of treatment, as well as what you think is right for your dog. There may be more than one treatment option, so if one doesn't work for you and your dog, your vet may be able to offer another.

Consider [insuring your dog](#) as soon as you get them, before any signs of illness start. This will ensure you have all the support you need to care for them.

Caring for a blind dog

Dogs that lose their vision gradually often adapt really well with the correct care, but unfortunately this isn't always the case for dogs that lose their vision suddenly. There are many things you can do to help your dog if they have reduced vision or have gone blind.

[Read more about caring for a blind dog.](#)

Breeds and screening

Any breed can develop secondary glaucoma, but certain breeds of dog are particularly prone to primary glaucoma. There are two types of primary glaucoma that each affect different breeds of dog.

1. 'Closed angle glaucoma' affects the following breeds:

- English and American Cocker Spaniels
- English and Welsh Springer Spaniels
- Basset Hound
- Bouvier des Flandres
- Labrador and Golden Retriever
- Flat-coated Retriever
- Great Dane
- Welsh Terrier
- Dandie Dinmont Terrier
- Japanese Shiba Inu
- Siberian Husky
- Samoyed
- Chow Chow
- Shar Pei
- Boston Terrier

2. 'Open angle glaucoma' affects the following breeds:

- Norwegian Elkhounds
- Petit Basset Griffon Vendéen
- Beagles (in the USA)

We can reduce the number of puppies born who are likely to develop glaucoma by screening 'at-risk' breeds before breeding from them. Breeding dogs should be screened from 6 months of age, then every few years to make sure they're not developing glaucoma. Any dog that scores poorly shouldn't be used for breeding. If you're thinking of getting one of the breeds listed above, always ask if the parents are being regularly screened for glaucoma.

Published: Sept 2020