

GLAUCOMA

ABOUT THE DISEASE

Glaucoma is an eye disease caused by elevated pressure within the eye (intraocular pressure), which is often very painful and can lead to blindness. In a normal eye, a clear fluid called aqueous humor is produced in the front chamber of the eye at a regular rate and is then filtered out of the eye at a regular rate. **Glaucoma** will develop when there is an imbalance between fluid production and fluid drainage.

An affected eye may initially appear normal, but will progress to:

- Reddening of the eye
- Cloudiness cornea
- Dilation of the pupil
- Squinting of the eye (blepharospasms)
- Bulging of the eye (buphthalmia)
- Lens displacement or luxation
- Temporary and then permanent blindness (up to 40%)

Glaucoma is often categorized as one of two types:

- Primary Glaucoma Anatomic or biochemical problem that affects how fluid drains from the eye.
- Secondary Glaucoma Results from another disease process within the eye.

Unfortunately, even if a single eye is symptomatic first, most patients are prone to both eyes developing glaucoma.

OBTAINING A DIAGNOSIS

A thorough clinical history and physical examination with a veterinarian often yields a presumptive diagnosis.

The patient's eye pressure (intraocular pressure) can be measured during a routine eye exam, and both eyes are often measured for comparison and early detection in the opposite eye.

TREATMENT

Glaucoma usually requires lifelong treatment unless the underlying cause can be reversed or treated successfully.

Several different types of medications are available, but fall within the following categories:

- Beta-blockers (Timolol) typically two times per day
 - Not recommended for patients with dry eye, heart disease, or respiratory disease.
- Carbonic anhydrase inhibitors (Dorzolamide) typically three times per day
 - May be slightly irritating when administered
- Cholinergics (Pilocarpine) typically two to three times per day
 - o Not recommended for patients with lens luxation or severe uveitis
- Prostaglandins (Latanoprost) typically one to two times per day
 - o Not recommended for patients with lens luxation or severe uveitis

Other, less common options are available through ophthalmologist referral.

In acute (sudden) cases, fluid can be removed from the eye using a procedure called aqueocentesis.

In final, end-stage cases, patients may have their eye(s) removed (enucleation). Please see the <u>Enucleation</u> document for additional information.

TIPS FOR SUCCESS

- In most cases, **glaucoma** is not curable and once vision is lost it will not return.
- If a patient has developed blindness in one or both eyes, they no longer need the eye. It will only serve as a chronic (longterm) source of pain and discomfort if not surgically removed.

CAREGIVER RESOURCES 8/9/22