



# ACVO Vision for Animals Foundation



*Immediate referral to and evaluation by  
a board certified veterinary  
ophthalmologist is key in providing the  
best possible outcome.*

THE ACVO® VISION FOR

ANIMALS FOUNDATION

GLAUCOMA

*"...that light shall prevail  
over darkness..."®*

In 2001, with the support and sponsorship of the ACVO®, the ACVO® Vision for Animals Foundation (VAF) was established to support research leading to the elimination of ocular diseases causing vision loss and suffering in animals. The VAF is a 501(c)(3), not-for-profit organization, which strives to realize its mission by funding animal eye disease research conducted by qualified animal health care professionals and research scientists. The VAF is funded exclusively through tax deductible donations from private individuals such as concerned animal owners, industry supporters, and Diplomates of the ACVO®. More information can be found at [www.visionforanimals.org](http://www.visionforanimals.org)

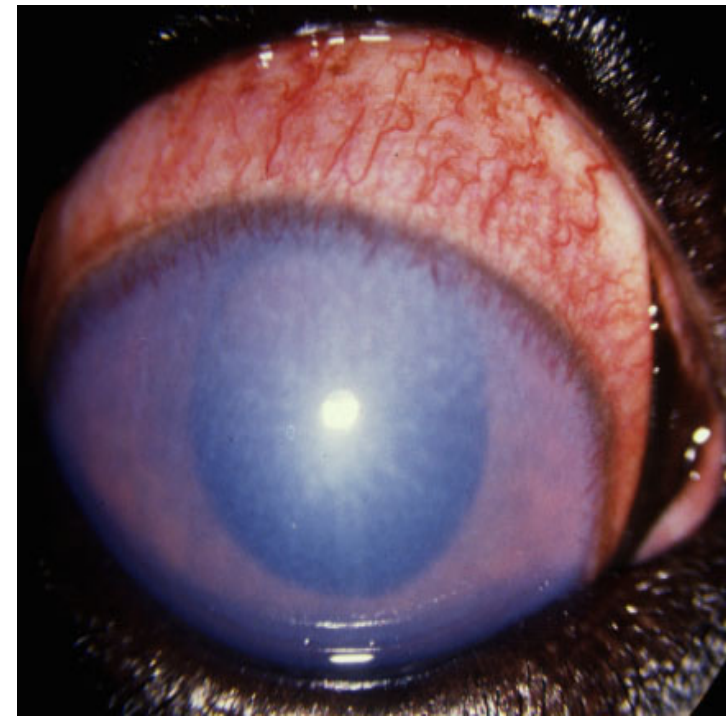


*The ACVO® is continually involved in basic and clinical research developing new diagnostic procedures and treatment regimens. The genetics committee of the ACVO® works closely with breeders to better define and help eliminate inherited ocular diseases. The name of a Diplomate closest to you may be obtained from a general practitioner in your area or on-line at:*

**[www.ACVO.org](http://www.ACVO.org)**

*For information about our free eye exams for  
Service Dogs, visit:*

**[www.ACVOeyeexam.org](http://www.ACVOeyeexam.org)**



## UNDERSTANDING GLAUCOMA

Glaucoma is one of the leading causes of blindness in animals and people. By definition, glaucoma is increased pressure within the eye beyond that compatible with normal ocular function and vision. It is caused by a disturbance in the flow of fluid within and out of the globe.

## WHAT CAUSES GLAUCOMA?

Primary glaucoma is usually caused by an inherited abnormality of the drainage angle, and is breed-related. Breeds predisposed to inherited glaucoma include: Cocker Spaniels, Basset Hounds, Beagles, Chinese Shar Pei, Chow Chows and Jack (Parsons) Russell Terriers.

Secondary glaucoma may occur secondary to inherited lens luxation (dislocation). Breeds particularly susceptible include several terrier breeds including Jack (Parsons) Russell Terriers, Wire-haired Fox Terriers and Chinese Shar Pei. Other causes of secondary glaucoma include: inflammation, trauma, and intraocular tumors. All of these factors can obstruct the drainage of fluid from the eye.

Acute glaucoma is an ophthalmic emergency and must be treated immediately. If the pressure remains elevated for even a few hours, permanent vision loss occurs. An accurate diagnosis of glaucoma is based on a thorough ocular examination and measurement of the intraocular pressure with a tonometer.

## SYMPTOMS OF GLAUCOMA

The signs of glaucoma include: redness, cloudy eye, tearing, loss of vision, an enlarged eyeball, lethargy, loss of appetite and occasionally, vomiting. The disease is quite painful in most cases, especially when the eye pressure is very elevated. Human patients complain of severe headache or migraines.

The fluid that fills the eye is made at the base of the iris. This fluid travels through the pupil to fill the front chamber, and exits out where the iris meets the cornea. When there is an obstruction in the outflow of the fluid the pressure in the eye is increased and glaucoma occurs.

### { CRYOCYCLOABLATION OF THE CILIARY BODY }



*The measurement of eye pressure is the only way to know if glaucoma is present.*

## TREATING GLAUCOMA

The disease is difficult to treat but several options are available. Treatment is planned based on the type of glaucoma, underlying causes, the prognosis for vision, and overall health of the patient. Treatment is aimed at control, as glaucoma is rarely cured. The prognosis is often dependent on early detection and treatment. However, due to the nature of the disease many animals lose vision despite treatment. In primary glaucoma, typically, the second eye will be affected within 2 years. It must be stressed that glaucoma is a disease that requires long term and vigilant treatment with consistent monitoring by an ophthalmologist.

Permanent resolution of glaucoma is recommended for blind or painful eyes. Options include enucleation (removal of the eye), intra-scleral prosthesis (replacing the contents of the eye with silicone) or destruction of the part of the eye which produces fluid. There are pros and cons to each of these treatments, and these variables are discussed during examination by the veterinary ophthalmologist.

### { DOG EYE WITH A GONIO IMPLANT }

