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## Canine Glaucoma

**What is glaucoma?** Glaucoma is an increase of pressure within the eye. If the pressure within the eye is elevated for more than several hours, permanent damage or blindness can result.

**What causes glaucoma?** Glaucoma is due to an obstruction to the drainage of aqueous humor from the eye. Continued fluid secretion into the sealed eye elevates the intraocular pressure.

**Are certain breeds of dogs prone to glaucoma?** Yes. The American Cocker Spaniel, Basset Hound, Siberian Husky, Samoyed, and Shar Pei are prone to glaucoma, although any breed of dog may be affected.

**How do I recognize that my dog has glaucoma?** Most dogs with glaucoma will suddenly have a red, painful eye. Many dogs exhibit eye pain by a loss of appetite, excessive sleeping, or a decrease in activity. A decrease in vision is usually not recognized unless both eyes are affected. Some breeds of dogs will not have a red, painful eye but will have only a slow loss of vision.

**How is glaucoma treated?** Glaucoma that has been present for less than 48 hours requires emergency treatment. Although only a small percentage of dogs regain vision in an eye that has glaucoma, emergency treatment helps relieve the extreme pain associated with this condition. If your dog has had glaucoma for more than 48 hours, emergency treatment may not be effective. Emergency treatment generally requires one day of hospitalization. Long term treatment is often needed to control glaucoma requiring oral medication and/or eye drops for the rest of your pet's life. A surgery to relieve increased eye pressure is frequently recommended instead of long term medication if the eye is permanently blind.

**Do the medications have side effects?** Occasionally, the oral medication used for glaucoma, Daranide, may produce a loss of appetite and lethargy. On rare occasions, vomiting and/or diarrhea may occur. The eye drops may cause temporary redness and tearing immediately after instillation.

**What surgeries are available for glaucoma?**

### *The Eye With a Potential for Vision —*

**Laser:** Laser energy can be directed into the eye to selectively destroy the fluid producing cells. This "turns down" the flow of fluid into the eye and subsequently reduces intraocular pressure. Laser surgeries are about 75% effective in keeping an eye comfortable, amount of vision restored to the eye is dependent on the amount of damage done during the pressure spike.

### *The Blind Eye —*

**Eye Removal (enucleation):** Although this surgery seems drastic, enucleation is the most reliable way to alleviate the source of your pet's pain. The eyeball is removed, a silicone ball is placed in the eye socket, and the eyelids are permanently sutured over the ball. The ball prevents the skin over the eye socket from sinking in.

**Intraocular Evisceration & Implantation:** The inner contents of the eye are removed and replaced with a black silicone ball. The outer portions of the eye remain. The eye is sutured shut for 4 weeks while the eye heals. This surgery is often chosen by pet owners who cannot tolerate eye removal. The resulting eye does not look exactly like the dog's original eye but may be more cosmetically appealing than enucleation.



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## **Canine Glaucoma — continued**

**Can I prevent glaucoma in the fellow eye?** Unfortunately, no. Regardless of treatment, glaucoma usually occurs in the fellow. Treatment of the normal eye may delay glaucoma from occurring an average of thirty months. If glaucoma medications are instituted prior to the onset of glaucoma, glaucoma may be postponed beyond 1 year.

**How often should I return for eye exams?** While your dog is on preventative glaucoma treatment, you should have his/her eyes examined 4-6 times each year.

**What do I do if glaucoma occurs in the normal eye?** If you notice redness, irritation, or a decrease in vision in the normal eye, you should seek veterinary assistance immediately! Your veterinarian or local emergency clinic will begin emergency treatment.