

## **Equine Glaucoma**

Glaucoma is a disease which occurs when the intraocular pressure increases inside of the eye. Intraocular pressure increases due to a decrease in outflow of aqueous humor (the fluid within the eye). The optic disk, which is located in the back of the eye, is the connection between the eye and the brain. This structure can be damaged when the pressure within the eye remains elevated for a prolonged period of time and can result in blindness. Glaucoma is frequently seen in older horses and Appaloosas. This condition can occur secondary to chronic or recurrent uveitis or secondary to tumors within the eye.

Clinical signs of glaucoma include an enlarged globe, cloudiness of the cornea, small white streaks within the cornea (also called stria), decrease in vision, small pupil, squinting of the eye, increased discharge and redness around the margins of the globe. A tonometer (an instrument which measures the intraocular pressure) is used to diagnose glaucoma. Normal intraocular pressure is between 17 and 28 mmHg. An increased intraocular pressure above normal is diagnostic for glaucoma.

Treatment for glaucoma depends both on the primary cause of the disease and if the eye is visual. The goal of treatment for glaucoma is to increase the outflow of fluid in the eye. Medical treatment of glaucoma includes medications which decrease aqueous humor production such as Timolol and Trusopt as well as non-steroidal anti-inflammatory drugs such as Banamine. If medical therapy does not adequately decrease the intraocular pressure, cyclophotoablation is an option in order to maintain vision. This procedure uses a laser to destroy the ciliary body, the structure in the eye which produces fluid. Horses that are blind from glaucoma are often painful due to the increased pressures within the eye. If the horse is not comfortable with medical treatment, enucleation (removal of the eye) is frequently

recommended. Please contact your veterinarian if you have any questions or concerns regarding glaucoma.

Contact Brandon Equine Medical Center at 813-643-7177 or email [info@brandonequine.com](mailto:info@brandonequine.com) with any questions regarding this topic.