| Clinical Signs of Glaucoma - Equine Ophthalmology First Edition                                 |  |
|---|--|
| Primary Glaucoma  | Secondary Glaucoma   |
| Initial Stages  | Initial Stages   |
| Focal or diffuse oedema Minimal pain Subtle ocular signs Minimal vision loss Haabe Striae       | Persistent corneal oedema Severe pain Evidence of chronic uveitis Vision loss and blindness                  |
| Late Stages   | Late Stages  |
| Diffuse corneal oedema<br>Enlarged eye<br>Vision loss / blindness<br>Mild to moderate discharge | Diffuse corneal oedema Enlarged eye Vision loss / blindness Signs of chronic uveitis Corneal vascularisation |

#### **Treatments**

Medications, surgery or both are required to help control glaucomatous eyes. The underlying uveitis must be controlled with NSAID's both topically and systemically. The cornea must be rigorously examined before starting topical anti-inflammatory drops in cases of existing damage to the epithelium.

### **Useful Anti-glaucoma medications**

- Topical beta-adrenegics (Timolol)
- Topical carbonic anhydrase inhibitors (Dorzolamide)

## **Drugs Potentially Contraindicated**

- Topical cholinergics (Pilocarpine)
- Topical prostaglandin analogues (Lantanoprost)
- Atropine will elevate the intraocular pressure

## Surgical options for visual eyes

- · Cyclophoto-coagulation Laser
- Glaucoma shunt placement

#### Surgical options for blind painful eye

- Eye removal
- Intrascleral prosthetic
- Intravitreal gentamicin



# **Take Home Messages**

Glaucoma is difficult to diagnose in horses

It is usually secondary to uveitis

**Protracted treatment is required** 

Left untreated will lead to vision loss and pain