



South Shore Equine Clinic & Diagnostic Center
151 Palmer Road
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OPHTHALMIC EMERGENCIES

-What constitutes an ocular emergency?

Many problems involving the horse's eye are true emergencies and need to be evaluated immediately by a veterinarian if retention of vision and /or the globe will be possible. The following is a list of ocular emergencies that should prompt a call to your veterinarian because long term prognosis may depend on immediate, accurate diagnosis and treatment.



- Blunt head / ocular trauma
- Corneal ulcers (these are painful and will typically cause excess squinting, tearing, and swelling of the eyelids)
- Eyelid lacerations / corneal laceration
- Acute swelling of the eyelids or periocular tissue
- Acute blindness or visual disturbance
- Excessive drainage from the medial canthus (inner corner) of the eye
- Hyphema (blood) in the eye
- Glaucoma (looks like the entire eye is enlarged, with a bluish hue)
- Stromal abscess (often looks like a yellow to tan spot in the cornea; see figure 3)
- Uveitis (intraocular inflammation)
- Facial nerve paralysis resulting in the inability to close the eyelids (this causes exposure keratitis / ulceration of the cornea)

-What can I do for the eye while I wait for my veterinarian to arrive?

You can gently apply a cold compress to the eye / periorbital region for 10 minutes, if the horse allows it. This will help with swelling if the injury occurred recently. Do not attempt to pry the eyelids open, as this could potentially cause more pain, or force a penetrating foreign body further into the globe, if present. Do not administer any medications without first consulting with your veterinarian. If head trauma was sustained, and the horse is bleeding, you can apply constant pressure to the wound with a clean towel to help stop the bleeding.

-What if my horse sustained blunt head / ocular trauma, but there are no clinical signs of damage to the head or eye; do I still need to call my veterinarian?

Depending on the severity of the injury, it is always best to call and have the horse evaluated. Horses can develop neurological signs (depression, ataxia (incoordination), etc.) from head trauma. Also, if there was blunt trauma to the eye – even if it appears that the eye is normal, the optic disc and retina (visualized in the back of the eye with specialized equipment) could have been affected which could cause vision loss. Therefore it is best to have your veterinarian evaluate the eye to make sure this did not occur, as it is best to institute treatment as close to the time of injury as possible to help retain vision.



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-What type of exam will my veterinarian perform to evaluate the eye?

Your veterinarian will perform a thorough ophthalmic examination. We will assess the horse's vision with menace responses and pupillary light reflexes. Depending upon the nature of the emergency, the horse may need to be sedated. The nerve that controls movement of the eyelids may also have to be blocked with a small amount of local anesthetic to ensure that we can obtain full visualization of the globe. We will then evaluate the front of the eye, known as the anterior chamber, as well as the back of the eye, called the fundus with specialized ophthalmic equipment. Thorough examination of all ocular structures will give us the best idea of what type of ocular problem is present. We also have the ability to measure intraocular pressure via tonometry. This can help diagnose diseases such as glaucoma and equine recurrent uveitis. Instilling green fluorescein stain into the eye is very important to diagnose breaks in the corneal surface resulting in ulceration. If an ulcer is present, the dye will fluoresce in the presence of cobalt blue light. If the horse has sustained ocular trauma, we will also palpate the orbital rim for fractures, although it is sometimes necessary to obtain radiographs for an accurate diagnosis.

-What if I am unable to treat the eye with medications at the farm because my horse will not let me?

Some ophthalmic problems such as severe corneal ulcers or stromal abscesses require treatment with multiple ophthalmic medications every two hours, or even hourly. In these cases, we recommend hospitalizing your horse at the clinic so we can instill the medications using a subpalpebral lavage (SPL figure 1) catheter. The SPL can be placed through either the upper or lower eyelid under standing sedation. Most horses tolerate the SPL and therefore frequent administration of medications very well. This allows for optimal treatment of severe corneal disease.

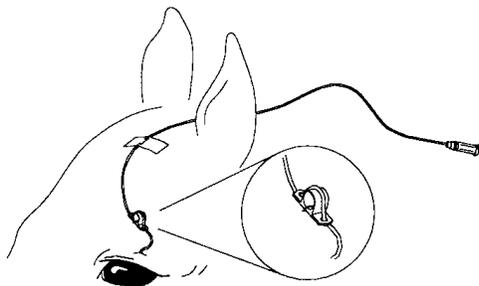


Figure 1 Subpalpebral Lavage Catheter

Figure 2 Glaucoma



Figure 3 Stromal abscess

