

## Open Your Eyes to Equine Uveitis

One of the most common eye diseases and *the* most common cause of blindness in horses is equine recurrent uveitis (ERU), also called moon blindness or periodic ophthalmia. Uveitis is defined as inflammation of the uveal tract of the eye, which consists of the iris and ciliary body (anterior uvea) and the choroid (posterior uvea). The clinical disease, however, involves all aspects of the equine eye.

There are three general causes of uveitis in horses: ocular, systemic, and immune-mediated (ERU). Ocular causes include trauma, corneal ulcers, lens induced uveitis, or immune-mediated uveitis. Essentially any insult to the eye may result in a reflex inflammatory response within the globe itself. Systemic causes include any infectious bacterial, viral, parasitic, or associated disease that results in systemic illness. ERU is an immune-mediated uveitis that is characterized by intermittent episodes of intraocular inflammation. Contrary to ocular and systemic manifestations of uveitis, ERU is a syndrome with documented chronic recurrence of inflammatory episodes. Any horse may be affected but the Appaloosa breed seems to be predisposed to ERU.

Clinical signs of uveitis in horses are primarily manifestations of ocular pain. Holding the eye partially or completely closed, excessive tearing, redness of the membranes around the eye, and swelling of the eyelids may be obvious when looking at your horse. Upon further inspection, a hazy blue cornea (corneal edema) may be visible.

Because eye problems are best treated when caught early, a prompt call to your veterinarian is in order if you find your horse with a painful eye. A thorough examination may reveal a constricted pupil (miosis), aqueous flare (protein in the anterior chamber), decreased pressure inside the eye, or iris changes. The cornea will be stained and examined for any ulceration. The back of the eye (lens and fundus) will also be examined for any changes consistent with acute or chronic inflammatory changes.

Goals of treatment are to preserve vision and reduce ocular inflammation in an attempt to limit permanent damage to the eye and control pain. If not a recurrent problem, identification and correction of the underlying cause is crucial to successful treatment. The treatment of uveitis involves both topical and systemic anti-inflammatory medication to decrease damage to internal ocular structures. Also, dilation of the pupil is critical to prevent permanent ocular damage. Treatments to dilate the pupil and decrease inflammation may be required every 2 hours around the clock. Because many horses are difficult to treat topically long term, your veterinarian may need to place a tube (subpalpebral lavage or SPL) in your horse's eye to make treatment possible. Referral to a veterinary ophthalmologist or hospitalization may also be indicated to ensure 24 hour care and monitoring of the eye.

The prognosis of equine uveitis is variable depending on the underlying cause. For ERU, the prognosis is guarded as the frequency and severity of the attacks are variable. More recently there are surgical procedures (cyclosporine implants) that can help decrease the frequency and severity of ERU episodes. Common consequences of ERU are cataract formation, lens luxation, and blindness. Early intervention and careful management of ocular disease is critical to ensuring your horse has a lifetime of excellent vision.

The veterinarians and staff at New England Equine Medical & Surgical Center have the expertise and facility to treat advanced equine ophthalmologic problems. A board certified ophthalmologist, Nicholas Cassotis, DVM, DACVO is available for equine eye emergencies and for routine appointments and surgical procedures on Fridays. If your horse has uveitis or another eye problem, and your veterinarian thinks further evaluation is necessary, please call us at NEEMSC with questions or for an appointment with the ophthalmologist.

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