

EQUINE RECURRENT UVEITIS

WHAT IS EQUINE RECURRENT UVEITIS (ERU) / MOON BLINDNESS

ERU is the leading cause of blindness in horses and is a disease in which there are periodic episodes of inflammation within the eye. Unfortunately, the repeated episodes of inflammation result in damage that leads to progressive vision loss. It is estimated that around 10% of horses in the United States are affected with ERU with the most common breeds affected being the Appaloosa, Quarter Horse, Thoroughbred, and Warmblood. Most horses are affected between 10-15 years of age

WHAT CAUSES ERU?

The cause of ERU is poorly understood but is likely due to multiple factors, all resulting in immune-mediated inflammation. A bacteria called Leptospirosis may result in the initial bout of inflammation, but it is not thought to perpetuate the disease.

SIGNS THAT YOUR HORSE MAY HAVE ERU

Many horses show signs of discomfort including squinting, excessive tearing, thick mucus discharge, cloudiness of the eye, and sensitivity to light. Vision deficits may also be noted, including spooking behavior, altered performance, resistance to walk from a lighted area into a dark area, and head shaking. Unfortunately, some horses show minimal to no signs until significant, permanent vision loss is observed. One eye may be affected at first, but in over 80% of cases, both eyes are affected, although to different degrees.

It is the re-occurring episodes of inflammation that lead to progressive damage and vision loss. Therefore, it is important to have your horse evaluated by a veterinarian if any of the above signs are observed, even if they resolve within one to a few days.

DIAGNOSIS OF ERU

The diagnosis is based upon documenting multiple episodes of inflammation while also ruling out other causes. In blue-eyed horses, the blue may turn to a yellow-green color. It is important that horses be evaluated for other causes of discomfort prior to restarting treatment, as treatment for ERU may be severely detrimental to other eye problems, such as a corneal ulcer or viral infection.

TREATMENT FOR HORSES WITH ERU

Medical treatment consists of aggressive anti-inflammatory therapy using both eye and systemic medications. Often, multiple eye medications may be used two to four times a day in conjunction with either Banamine or Bute. The long-term prognosis with medical management is guarded to poor, as about 50% of affected eyes will go blind.

Surgical treatment consists of placing an implant containing an immunosuppressive drug (cyclosporine) inside the eye. A good surgical candidate is a horse that is having multiple episodes of inflammation each year with each one responding to medical therapy. At the time of surgery, the eye should have minimal to no inflammation in order to improve post-operative outcome.

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The overall success rate of surgery is about 80% (all horses) with Appaloosas maintaining a success rate closer to 90% while Quarter Horses and Thoroughbreds have a success rate closer to 65%. The implant is also thought to last four to five years, so it may be necessary to repeat the surgical procedure. Anti-inflammatory therapy will still be needed for at least three to four weeks post-surgery, as it takes about a month to reach adequate drug levels inside the eye. Additionally, some horses may still require eye medications despite the implant, but the frequency is often reduced to once or twice daily.

Complications after surgery include corneal ulceration, persistent inflammation, high pressure inside the eye (glaucoma), cataract formation, and rarely, retinal detachment or broken limbs upon anesthetic recovery. All of these complications are vision threatening, but the poor prognosis with medical management (50%) and high success rate with surgery (80-90%) out-weighs the risks.

GOALS OF TREATMENT FOR ERU

The goal of either treatment option is to minimize frequency of inflammatory episodes, not cure the disease. It has been shown that surgery will reduce episodes of inflammation to about one per year while horses on medical management have six to seven episodes per year. With each episode of inflammation, irreversible damage occurs.