

Ask A Vet: Dealing with Ulcers in the Cornea of the Eye

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Dear Dr. Weldy's,

My horse was recently diagnosed with a corneal ulcer. What should I expect as far as treatment and time to recovery?

Dear Reader,

Equine corneal ulcers are the most common eye disorder we see. Usually, they occur because of a scratch or other trauma to the eye. A prominent eyeball and the tendency of the horse to move quickly in response to external stimuli combine to predispose the horse to quick movements of the head which leads to injury of the eye. Nails, broken boards, loose fence wire and hay stems are some of the more common offenders. Most of the time, a cause can not be determined. Signs of ulceration include squinting, tearing, redness, obvious discomfort and sensitivity to light. The eye may appear cloudy instead of clear and will sometimes have red squiggly lines around the periphery. These lines are new blood vessels trying to help heal the defect in the cornea.

The cornea is the outer dome shaped covering of the eye. Its functions include transmitting light to the inner structures, protecting the inner eye, and maintaining structural integrity to the globe. A normal cornea is only about 1 to 1.5mm in thickness, so it doesn't take much of a scratch to penetrate. Fortunately, the cornea heals fairly quickly, especially with small ulcerations, which may take one to two weeks to heal completely. Deeper ulcers are more serious and can threaten the ability of your horse to see clearly through that eye. Prompt veterinary care is always recommended, because even a simple, superficial ulcer can become infected and lead to vision loss.

When your vet arrives, he/she will use a fluorescein dye to stain the eye and determine the depth and size of the ulcer. Typically, antibiotics are applied to the eye in an ointment or liquid drop form as well as atropine to help with pain relief and to protect the inner structures such as the iris. Banamine, a non steroidal anti-inflammatory, is commonly used to treat the pain and inflammation. In complicated cases, the corneal ulcer may deepen rapidly or the surrounding corneal tissue may seem to degrade or melt. This can lead to rupture of the eye and prolapse of iris (the colored part of the eye) through the hole in the cornea. Usually melting ulcers are caused by a secondary bacterial or fungal infection. Aggressive treatment is required for days to weeks and may require referral to a veterinary ophthalmologist. Scarring of the cornea is much more likely with deeper defects.

Regardless of the severity of the ulcer, your horse should be kept out of bright sunlight and in a low dust environment. A fly mask with a patch sown over the affected eye can allow horses access to pasture in the day time. Watering the stall or paddock and feeding hay on the ground can help eliminate irritating dust and help speed the healing of your equine friend.

-Dr. Wade Hammond