

# Corneal Ulcer

What it is and what can be done to treat it for the prevention of chronic eye problems.

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## WHAT YOU SEE

- A watery discharge from your horse's squinted eye, along with a small glob of thicker material built up in the corner of his eyelid.
- The eyeball appears cloudy instead of clear, and you notice fine, squiggly red lines, surrounding what looks like a nick in the *cornea*, the normally clear part of the eyeball.
- The eye appears sensitive, because your horse clamps down his eyelid and pulls his head away when you touch the side of his face.

## WHAT SHOULD YOU DO?

1. Call your veterinarian immediately.

**Why:** This is an emergency. The nick in the cornea is an infected wound called a corneal ulcer. Without prompt veterinary treatment, a bacterial infection may cause the wound to get larger and deeper, increasing the risk that the eyeball itself will actually rupture, resulting in permanent damage. A corneal ulcer can not only affect the way your horse's eye looks, but can also leave your horse vision-impaired-or even completely blind in that eye.

Cloudiness indicates swelling, or edema, in the cornea. If this swelling persists, it can consolidate into a white disk of permanent, vision-impairing scar tissue, which may prevent the cornea from ever returning to its crystal-clear former self. The red, squiggly lines are tiny blood vessels growing around the wound to carry healing nutrients to it. Ironically, these blood vessels do more harm than good. They thicken the cornea, limiting access to the wound by infection-fighting antibodies. They also increase the eye's *opacity* (cloudiness)-thus the chance your horse won't be able to see with that eye, even if the ulcer heals.

2. Move your horse to a dark, quiet stall.

**Why:** To protect him from sunlight (which is painful to an ulcerated eye), bugs and wind (both can carry contaminants and dust into the ulcer). And, to remove him from potential conflicts with other horses that might pick on him while he's preoccupied with pain.

**How:** If it's sunny and/or windy, put a clean fly mask over your horse's halter as a shield. Leave it on until your vet arrives. If you don't have a clean fly mask, lead your horse to a clean stall with no bedding-or to one with wet bedding (to prevent dust). Remove all feed; it's dusty, plus, if your vet feels it's necessary to anesthetize your horse, it could interfere with treatment. (An empty stomach decreases the chance of anesthesia-related complications.) Provide fresh drinking water to prevent dehydration.

3. Stay with him until your vet arrives.

**Why:** Eye pain can be excruciating, and your horse may try to rub his eye on a front leg, a hind hoof, a hay rack, a bucket edge, etc. This could cause irreversible damage to an eye that otherwise might've healed beautifully.

**How:** Stand in or just outside your horse's stall while your horse is loose, as long as he's not rubbing his eye. If he starts to rub, either halter and hold him, or put him in crossties.

## PROGNOSIS

Guarded to good. Your vet might administer a sedative, such as xylazine (Rompun), which will help to relieve pain, relax your horse, and make him lower his head, so it'll be easier to work on his eye.

Then, your vet will take a culture of the cornea to identify the infection-causing bacteria. Next, he or she will probably numb the eye, then use a nerve block or anesthetic eye drops to relieve the immediate pain.

Your vet will then apply a bright-green stain to the eyeball to help determine the extent of ulceration. The stain will be followed by eye drops to dilate the pupil so he or she can examine the eyeball's interior. After thoroughly cleaning the wound and removing any tags of torn corneal tissue, your vet will probably give you an antibiotic and a medication to keep the pupil dilated, which will alleviate pain and help prevent adhesions in the eye.

Assuming your horse's eye condition improves, your vet will add a steroidal medication to your treatment routine. It'll help shrink the visible blood vessels in the cornea and clear away the cloudiness.

About half of all corneal ulcers show virtually no evidence of the ulcer within 3 weeks of treatment. In some cases, however, the eye improves, but a spot of scar tissue remains. In the worst case, the infection gets between the onion-like layers of the cornea or otherwise fails to respond to treatment. Should this happen to your horse, he'll need intensive treatment in a hospital setting to save his vision—and possibly the eyeball itself.

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