

# Corneal Ulceration

♥ Equine corneal ulceration is very common in horses and is a sight threatening disease requiring early clinical diagnosis, laboratory confirmation, and appropriate medical and surgical therapy.

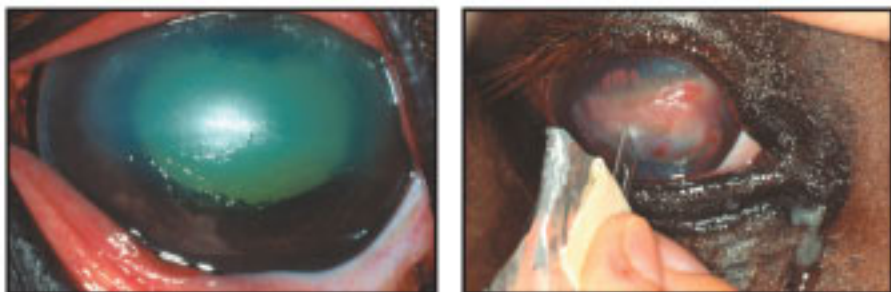
✓ Ulcers can range from simple, superficial breaks or abrasions in the corneal epithelium, to full-thickness corneal perforations with iris prolapse (Figures 5-1 to 5-148).

✓ The prominent eye of the horse may predispose to traumatic corneal injury.

● Both bacterial and fungal keratitis in horses may present with a mild, early clinical course, but require prompt therapy if serious ocular complications are to be avoided.

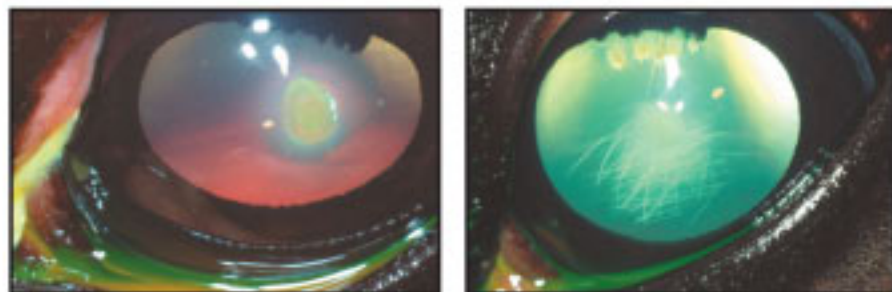
♥ Corneal ulcers in horses should be aggressively treated no matter how small or superficial they may be. Corneal infection and iridocyclitis are always major concerns for even the slightest corneal ulcerations. Iridocyclitis or uveitis is present in all types of corneal ulcers and must be treated in order to preserve vision (see Figures 5-6, 5-7, 5-52, 5-56, 5-71, 5-91, and 5-94).

✓ Globe rupture, phthisis bulbi, and blindness are possible sequelae to corneal ulceration in horses (see Figure 5-144).



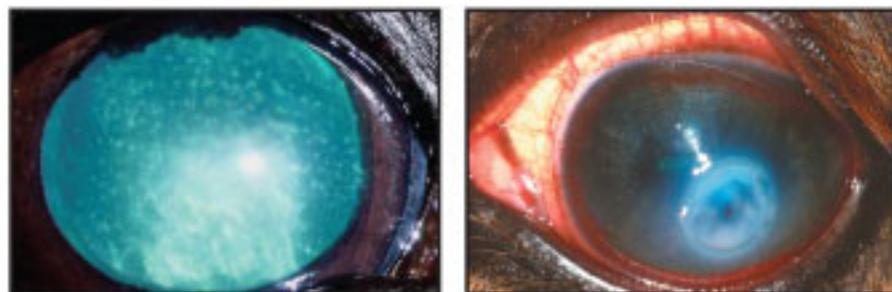
**Figure 5-1** (left) A large, superficial fungal ulcer has a dry appearance.

**Figure 5-2** (right) Three weeks later, cytology samples are again obtained with the handle end of a scalpel blade from the cornea in the horse in Figure 5-1. Profound granulation of the cornea is present after treatment for three weeks as the ulcer heals.



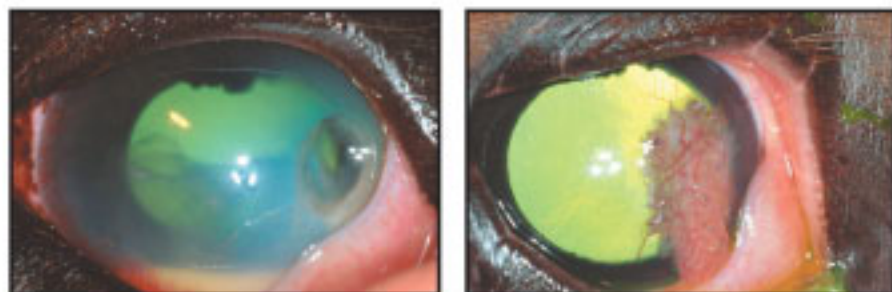
**Figure 5-3** (left) A superficial ulcer stains with fluorescein dye.

**Figure 5-4** (right) Following medical therapy and grid keratotomy, 20 days later the ulcer in Figure 5-3 has healed. Linear opacities in the cornea highlighted by the camera flash illumination are a result of the grid keratotomy.



**Figure 5-5** (left) Small dots are scars that resulted from the use of punctate keratotomy for an indolent ulcer.

**Figure 5-6** (right) Axial corneal ulcer in Figure 5-5 has the gelatinous appearance of stromal melting. The center of the ulcer is thinner and has a dark appearance. The miotic pupil indicates uveitis.



**Figure 5-7** (left) Deep ulcer near the limbus with uveitis causing hypopyon ventrally and fibrin in the pupil.

**Figure 5-8** (right) Three weeks postoperatively, a conjunctival flap is covering the ulcer in Figure 5-7. The signs of uveitis are absent.