



Corneal Ulcers

Introduction:

The outer surface of the eye consists of the white sclera and transparent cornea. Although the cornea is only about $\frac{1}{20}$ of an inch in thickness, it is intricately made of up to 5 layers of cells. A corneal ulcer occurs when one or more of these layers of the cornea are damaged. Vision is dependent upon the basic structure, function and integrity of the eye's cornea. Any damage to the eye can permanently affect your pet's vision and health and should be thought of as a medical emergency. Prompt medical treatment may be necessary to save your pet's vision.

Dogs have a higher incidence of corneal ulcers than do cats. Dog breeds with prominent eyes, such as Pekinese, Pugs, and Boston Terriers, are affected most commonly.

Causes:

Damage to the cornea resulting in ulceration is a common condition in all animals. The following list shows the many causes of corneal ulceration's.

Trauma

- Foreign object - foxtails, stickers, etc.
- Chemicals - acids, alkalis, and some shampoos, sprays and dips
- Abrasions - by clippers, sticks, whips, cat claws, etc.

Anatomic Abnormalities

- Hair or skin (eyelids and facial folds) that rubs against the corneal surface.
- Tumors of the eyelids can rub against and damage the cornea.
- Lagophthalmos, or failure of the eyelids to close completely, can allow the cornea to become dry and ulcerate. This is seen most often in prominent eyed dogs.

Infectious

- Bacterial - usually secondary to other problems
- Viral - herpes virus, calici virus in cats, canine distemper.
- Mycotic - fungal infections
- Chlamydial

Other diseases

- Glaucoma
- KCS - dry eyes

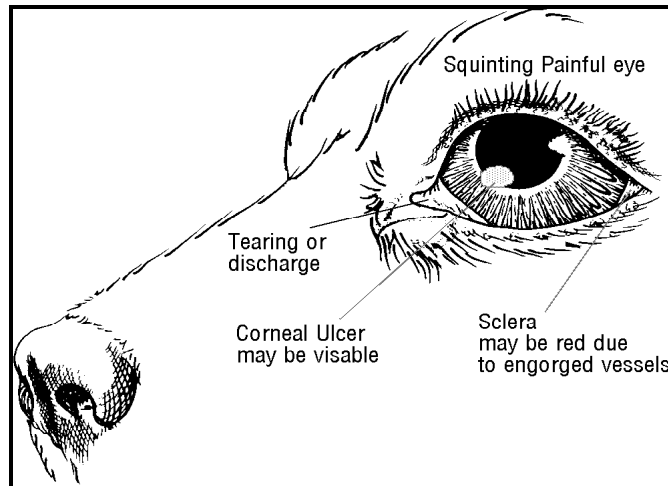
Clinical Signs:

Pain - usually manifested by squinting and pawing at the affected eye. You may also notice that your pet seems sensitive to bright light and that the pupil of the affected eye is smaller than the normal eye.

Discharge - seen as excessive tearing or as a mucoid purulent discharge.

White cloudy or red eyes

Signs of a Corneal Ulcer:



Diagnosis:

In addition to examining the eye, the veterinarian may want to apply a special stain to the eye that will show the exact location and estimate the depth of the corneal ulcer. As corneal ulcers can be very painful, some pets may benefit from sedation and allow the veterinarian to perform a thorough examination of the eye.

Treatment & Home Care:

When possible the underlying cause of the corneal ulcer should be determined and corrected. If a caustic chemical has gotten into your pet's eye, first flush out the affected eye with water for ten minutes then call your veterinarian. The next step is providing treatment to promote the cornea to heal. This will include ophthalmic ointments and/or eye drops. Sometimes an Elizabethan collar is needed to prevent pawing and self trauma to the eye. Deep or non-healing corneal ulcers may require surgical procedures to promote healing such as removing abnormal corneal tissue and short term closure of the eyelids with sutures.



It is important to treat this condition as a serious medical problem and to work closely with your veterinarian to help your pet recover from this illness.

Diagram of how to place medication into an eye:

- A. The lower lid is restrained with the hand holding the head. The upper lid is retracted with the edge of the palm.
- B. The container is held above the eye, and the dose is instilled.

