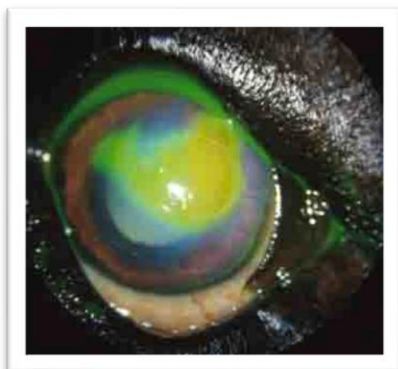


Corneal ulcers



CAUSE OF CORNEAL ULCERS



The cornea is a thin, transparent membrane that makes up the front surface of the eye. Corneal ulceration is erosion or wound on the surface of the eye. Most ulcers of the cornea are caused by **trauma or persistent infection**.

Injury can occur through stick injury, fighting or scratching.

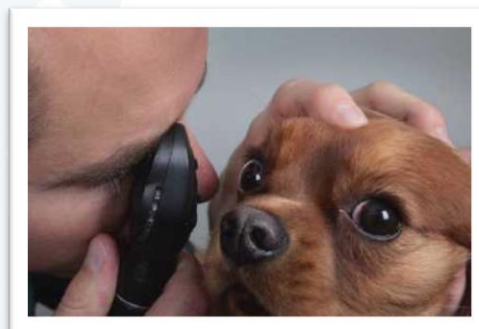
Entropion (rolled in eyelids), **cherry eye**, or **masses of the eyelid** can cause ulcers through chronic irritation.

The cornea then **ulcerates** which is noticed as an opaque area on the front of the eye.

DIAGNOSIS

Fluorescein stain is applied to the eye to determine the presence of an ulcer and its depth. A corneal ulcer will **fluoresce green** under a black light. The ulcer may be superficial (only involving the surface epithelium) or deep (involving both the surface epithelium and the underlying stroma)

Examination of the eye with an **ophthalmoscope** will determine the degree of inflammation that is present and if any other structures are affected. Ulceration of the cornea will often cause a secondary **conjunctivitis**.



TREATMENT

Simple ulcers that are shallow will heal rapidly with topical **antibiotic ointment/drops**.

Deeper ulcers will require longer courses of drops/ointment and may require **debridement** (cotton bud or needle tip) which may require **sedation**. It can take several weeks for these ulcers to resolve with medical treatment.



Non-resolving ulcers (indolent ulcers) or **very deep ulcers** may require surgery to prevent penetration through cornea (this requires the eye to be removed so is best avoided!). This involves a **conjunctival graft** to provide blood supply and protection of the ulcer to allow it to heal.