



Corneal Ulcers

What is a corneal ulcer?

The cornea is the transparent front layer of the eyeball. It is about 1mm in thickness and consists of several complex layers. An ulcer is caused by disruption in one or more layers of the cornea, moving from the outside, inwards. An ulcer may be shallow (akin to a scrape or abrasion) or become very deep, to the extent in which the eyeball ruptures. The deeper the ulcer becomes, the more vision is threatened. As the cornea is well supplied with nerves, ulcers are quite painful.

What causes a corneal ulcer?

- Trauma
- Chemicals: alkalis, acids, detergents
- Infection
 - Bacterial (possibly following trauma)
 - Viral (ie: herpes)
 - Fungal (quite rare)
- Tear film abnormalities
 - Keratoconjunctivitis Sicca (dry eye syndrome or KCS)
 - The tear glands produce inadequate fluid to lubricate the eye, causing the cornea to dry out and possibly ulcerate
- Cilia abnormalities
 - Distichiasis and Ectopic Cilia
 - Tiny hairs on the eyelids rub against the surface of the eye, causing both irritation and damage
- Exposure Keratopathy
 - Breeds with protruding eyes (the Pug, Shih Tzu, etc.) and/or shallow orbits may have poor closure of the eyelids. Subsequently the eye is not kept adequately moist, thus damaging the cornea.

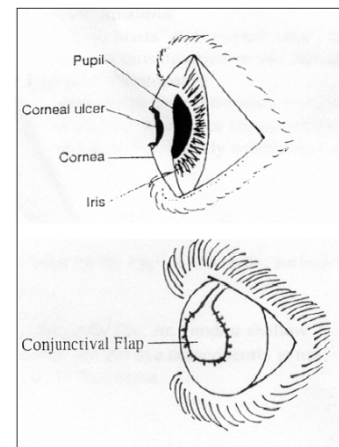
How are corneal ulcers treated?

Superficial, uncomplicated ulcers will normally heal within a few days, with the use of a prescribed, topical antibiotic ointment. However, deep ulcers may potentially erode all layers of the cornea, causing the eye to rupture. Surgical application of a 'conjunctival flap' is necessary to prevent this occurrence.

This procedure involves attaching a portion of the pink tissue which surrounds the eye, directly onto the ulcer, creating a flap. This flap not only provides protection, but supplies blood directly to the site, aiding the healing process. It heals directly to the cornea, where it will permanently remain. Alternately, synthetic grafting material may be used to heal the site instead.

What will I need to do at home?

The success of your dog's surgery depends upon a variety of factors, including your commitment to his aftercare. If you have any questions or





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concerns regarding what to expect in the weeks following surgery, please do not hesitate to contact us. We are always happy to answer your questions, and help ease any concerns you may have.

Once your dog is home, you will need to:

- Keep an Elizabethan Collar (cone) on him at all times, even at night
- Keep him quiet, refraining from vigorous exercise
- Carefully wipe away any discharge from the eye with a clean, moist tissue or face cloth
- Administer his medication as prescribed, ensuring it is given at the appropriate time (4 times daily, is the same as every 6 hours)
- If administering several different eye drops, wait 5 minutes between each drop, to ensure the medication is not flushed from the eye before it has the opportunity to absorb
- If giving both drops and ointment, always administer the drops first, ointment last. Ointments leave a residue on the eye, which will prevent drops administered immediately after from being absorbed
- Monitor your pet's eye for any changes, and contact us immediately should you become concerned

Frequent recheck examinations are a necessity, to ensure the eye is healing properly. Please be sure to book follow-up appointments as requested by the ophthalmologist!