

CORNEAL ULCERS

WHAT IS A CORNEAL ULCER?

The cornea is the transparent front layer of the eyeball. It is about 1mm thick and consists of several complex layers. An ulcer is caused by disruption in one or more layers of the cornea, starting from the outside going inwards. An ulcer may be very shallow, similar to a scrape or an abrasion, or it may be very deep, even to the point of causing the eye to rupture. The deeper the ulcer is, the more vision is threatened. The cornea is well supplied with nerves and therefore ulcers are quite painful.

WHAT ARE CAUSES OF CORNEAL ULCERS?

- Trauma
- Chemicals
 - alkalis, acids, detergents
- Infection
 - bacterial (possibly following trauma)
 - viral (e.g. herpes)
 - fungal (rare)
- Tear film abnormalities
 - KCS (“dry eye syndrome”): tear glands do not produce adequate fluid to lubricate the eye and the cornea dries out and can ulcerate.
 - Cilia abnormalities
 - “distichiasis” and “ectopic cilia”: tiny hairs on the eyelids rub on the surface of the eye, causing irritation and damage.
- Exposure Keratopathy
 - breeds that have protruding eyes (e.g. Pug, Shih Tzu, etc.) and/or shallow orbits may have poor closure of the eyelids and the eye subsequently is not moistened adequately and damage is done to the cornea.

HOW ARE CORNEAL ULCERS TREATED?

Superficial, uncomplicated ulcers will normally heal within a few days and topical antibiotic ointment is all that is required. Deep ulcers may potentially go through all layers of the cornea, causing the eye to rupture. To prevent this from happening, surgery is required to apply a “conjunctival flap” over the ulcer. This procedure is performed by attaching a portion of the pink soft tissue that surrounds the eye directly onto the ulcer. This flap provides protection and supplies blood directly to the ulcer site which aids in healing. It heals directly to the cornea and will remain permanently. Synthetic grafting material may be used instead.

WHAT WILL I NEED TO DO AT HOME?

- When using eye drops, be sure to hold the lids open so the medication is placed directly onto the eye. Wait 5 minutes between different drops so as not to flush

out the previous medication before it has been absorbed. If you are required to use ointment, always apply it AFTER all the drops have been given.

- Keep the head collar on at all times, even at night.
- Wipe away any discharge from the eye with a clean, moist Kleenex or face cloth.
- Keep your pet quiet.

