

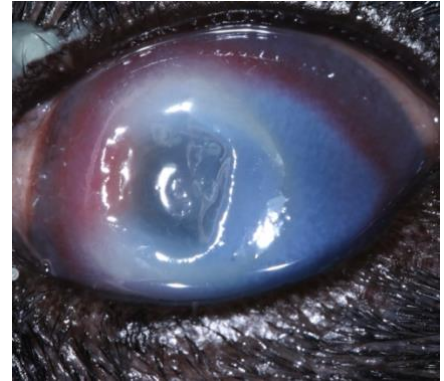


## Deep Corneal Ulceration

The cornea is the clear window at the front of the eye. A corneal ulcer is a wound in the cornea. When the ulcer becomes deep, it is a serious condition and often an emergency.

### Why is a deep corneal ulcer serious?

Deep corneal ulcers are painful and can worsen quickly. Because the cornea forms part of the outer wall of the eye, a deep ulcer means the eye is becoming dangerously thin at that point. Infection can make this worse, and some ulcers begin to “melt,” where the corneal tissue is rapidly broken down by destructive enzymes. If the ulcer deepens further, the eye can rupture. Even when the eye is saved, scarring may affect vision.



### What causes a deep corneal ulcer?

Deep corneal ulcers can develop for a number of reasons, including:

- trauma, such as a scratch, bite, or foreign body
- infection
- dry eye
- eyelid or eyelash abnormalities
- other eye disease that leads to ongoing irritation or poor corneal health

Sometimes more than one factor is involved.

### How is treatment decided?

Treatment depends on the individual case. Important factors include:

- how deep the ulcer is
- whether infection or melting is present
- the underlying cause
- the age, general health, and temperament of the patient
- how realistic frequent eye drop treatment will be at home

If an underlying cause is identified, this also needs to be treated. For example, surgery may be needed if eyelid or eyelash abnormalities are contributing to the ulcer.

### Medical treatment

Some deep corneal ulcers can be managed medically, but healing may be slow. Treatment usually involves intensive eye drops and sometimes additional oral medication. In more severe cases, drops may be needed as often as every two to three hours.

Medical treatment may be appropriate in selected cases, but it is not always enough to save the eye. Very deep ulcers, infected ulcers, and melting ulcers generally respond poorly to medical treatment alone.





## **Surgical treatment**

In many cases, surgery offers the best chance of saving the eye. Surgery helps provide more rapid healing and gives the cornea greater strength during recovery.

The most common procedure is a corneo-conjunctival transposition. This involves moving a flap of nearby healthy cornea, attached to the conjunctiva, into the damaged area and suturing it in place using an operating microscope.

Not every ulcer is suitable for this procedure. If infection is present, corneal crosslinking may also be recommended. This uses a specialised treatment to help sterilise bacteria within the tissue and strengthen the cornea.

If the ulcer has perforated, or if the eye cannot be repaired or kept comfortable, enucleation (removal of the eye) may be recommended to relieve pain. Although this can be a difficult decision, it is often a very positive welfare option, with no ongoing eye drops, more predictable healing, and fewer risks than attempting to save an eye with a poor prognosis.

## **Will my animal have vision after surgery?**

This depends on the severity and cause of the ulcer, and on whether vision was present before treatment. In many cases, useful vision can be retained, although some corneal scarring is expected. In other cases, surgery is performed mainly to save the eye and keep it comfortable, rather than to restore sight.

## **Prognosis**

The prognosis depends on how severe the ulcer is, how quickly treatment is started, and whether infection, melting, or perforation is present. Many eyes can be saved with prompt treatment. However, some cases result in permanent scarring, reduced vision, rupture, or loss of the eye despite treatment.

Please contact us immediately if the eye becomes more painful, more closed, if discharge increases, if the corneal appearance worsens, or if your pet becomes quieter, stops eating, or seems unwell. Deep corneal ulcers can deteriorate quickly, and urgent reassessment may be needed.

Prompt treatment and close monitoring give the best chance of saving the eye and preserving as much vision as possible.

