

Corneal Ulcers



A corneal ulcer is essentially a wound to the cornea. This wound can be varying depths, and it is this depth that we use to determine the severity of the ulcer. When thinking of severity of ulcers, and subsequent treatment options, we broadly classify ulcer into three categories:

- Superficial
- Mid-stromal
- Deep ulcers





Above left an eye with a very superficial ulcer, you can barely see to ulcer (red arrow). On the right is a pug with a very deep ulcer (white arrow).

What causes ulcers?

Ulcers commonly develop as a result of mechanical damage to the corneal surface. The most common causes are trauma (cat claw, thorns, etc.), overexposure (flat-faced breeds, facial paralysis, dry-eye, etc.), or infections (feline herpes virus, bacteria, etc.).

What are the signs of corneal ulcers?

Normally patients will have a combination of abnormal ocular discharge (this can be clear or mucky), reddening of the "white" of the eye, blue/hazy cornea, and/or increased blinking. However, some conditions, or even certain breeds, may not show any of these signs!



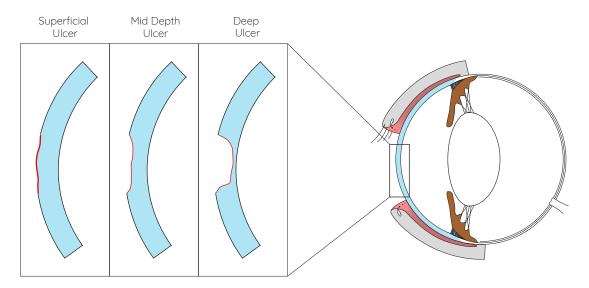


Both these patients have corneal ulcers, note how comfortable the pug on the left is compared to the dog on the right. We cannot always judge how severe the ulcer is by the patient's comfort level alone.

How are ulcers treated?

Superficial corneal ulcers are painful but do not pose a threat to the eyeball and are usually treated medically with few exceptions. Deep corneal ulcers however, can result in the eye bursting (known as corneal perforation) which is painful and will affect your pet's ability to see and sometimes might mean that your pet's eye may need to be removed. Surgeries for deep corneal ulcers usually involve placement of a 'graft' into the defect – which provides structural support to the eye.

Even though surgery is often the preferred option, it does not mean that deep ulcers cannot heal with medical treatment alone, however there is a significant risk that the eye could be lost if the ulcer ruptures under medical treatment. We can also operate on corneal ulcers that have already ruptured if the patient is presented quickly, but this surgery is more challenging and has a higher risk of complications than surgery carried out before the ulcer ruptures.



Digital representation of the three categories of corneal ulceration, "superficial", "mid-stromal" and "deep".

Your pet will be assessed by one of our ophthalmologists and a tailored treatment plan will be recommended to you, but broadly speaking the options tend to be:

- Superficial ulcer → medical management with drops and/or debridement
- Mid-stromal

 intensive medical treatment with drops and/or surgery
- Deep ulcers → surgical intervention

For more information regarding specific surgical interventions, please consult our "Corneal Surgery" factsheet.

