

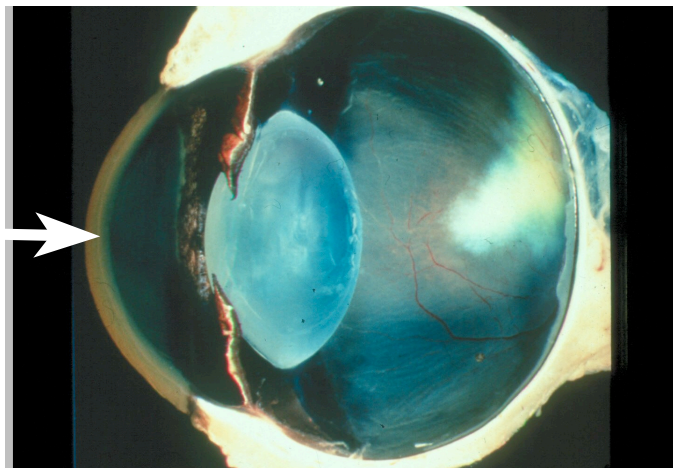


## Corneal Ulcers

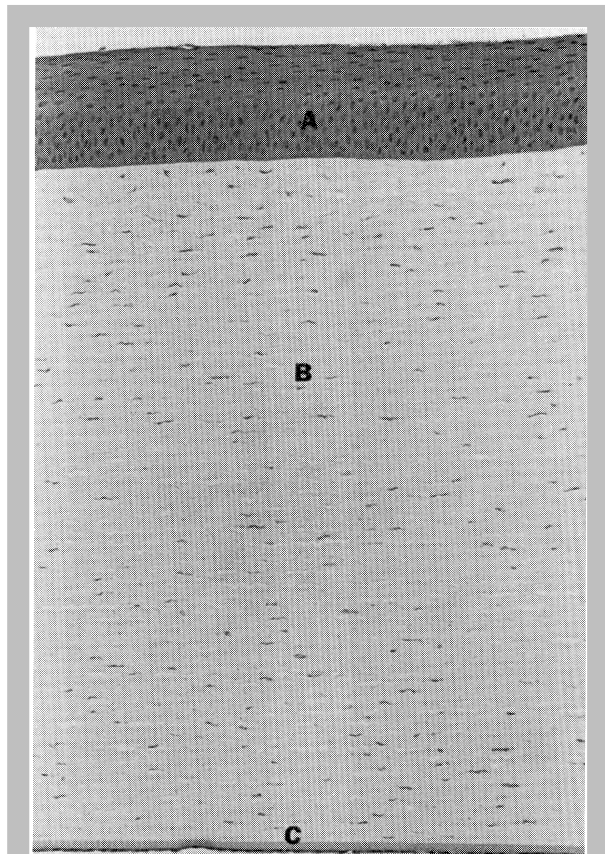
Corneal ulcers are a very common problem in dogs and cats and can be painful and lead to blindness or even loss of the eye. Prompt accurate assessment to determine the cause of the ulcer and the type of ulcer is vital to ensure appropriate treatment.

### What is a corneal ulcer?

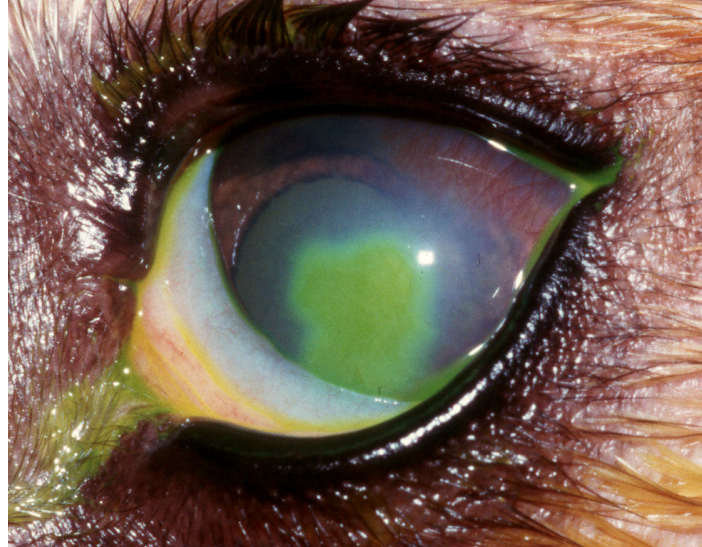
The cornea is the clear window at the front of the eye. It is only about 0.5mm thick and is made up of several layers. The outer layer is composed of 6-7 layers of cells and is called the epithelium (A in the diagram), which lies on the stroma (B). On the inside of the stroma is a layer called Descemet's membrane (C), and on the very inside is a single layer of cells called the endothelium (D).



An ulcer occurs when the epithelium is absent from the surface of the eye. Sometimes just the epithelium is absent leading to a shallow ulcer. These ulcers can be very painful as the superficial layers contain a rich number of nerve endings. When the ulcer extends into the stroma ulcers can seem more comfortable as there are less nerve endings here, but these ulcers are very dangerous as they can lead to perforation of the eyeball.



Corneal ulcers can be hard to visualise and are best diagnosed using a green stain called fluorescein. This dye stains the underlying stroma and not the epithelium, which therefore clearly shows those areas that from which the epithelium has been removed.



There are many types of ulceration and it is vital to determine which type of ulcer is present to enable the appropriate treatment. Failure to do so can result in devastating consequences for the eye.

More information on different ulcers can be found by following these links:

Indolent ulceration (recurrent corneal erosions)

Deep stromal ulceration and Descemetocoeles

Melting ulcers