

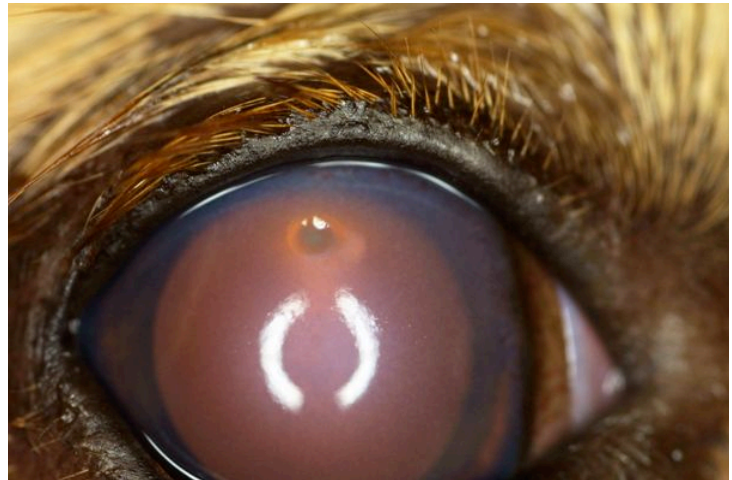


Deep Corneal Ulcers and Descemetocoeles

Deep corneal ulcers

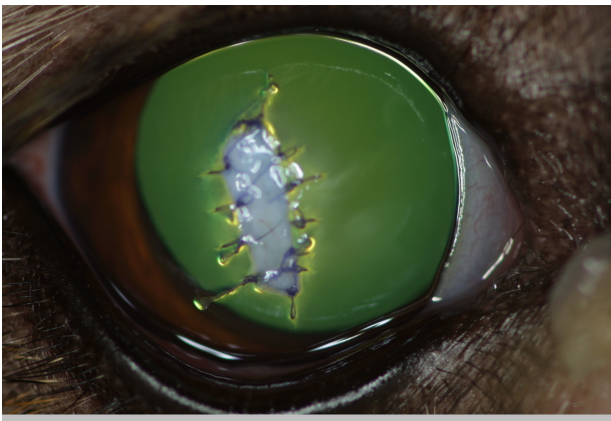
These ulcers are always a great concern, but they are of extreme concern in all the ‘large eyed’ breeds such as Pugs, Pekingese, Shih Tsus, Lhasa Apsos, King Charles and Cavalier King Charles Spaniels. These breeds are extremely susceptible to losing their eyes from these ulcers and urgent assistance is required to prevent loss of the eye.

Deep ulcers are an emergency situation. These ulcers not only involve the epithelium but also the underlying stroma. The cornea is only 0.5mm deep so any ulcer that penetrates into the stroma causes great weakening of the cornea and perforation can easily occur.



Surgery is generally required for these ulcers. Various options exist to help to support the cornea and prevent perforation and loss of the eye.

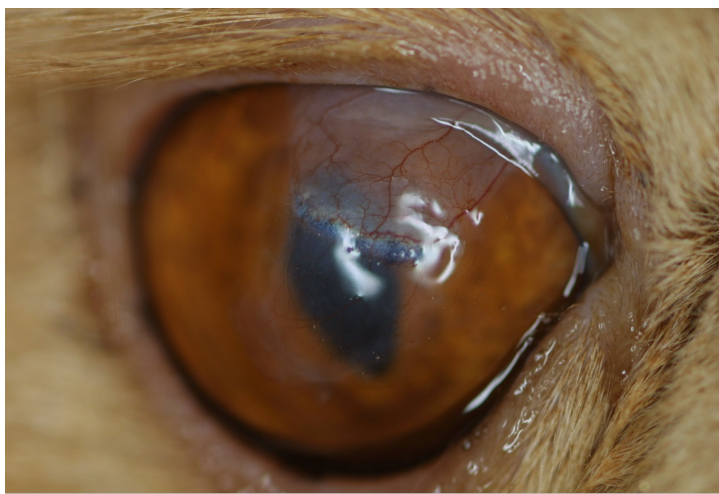
Conjunctival grafts can be used to support the cornea. This surgery uses the membrane around the eye called the conjunctiva to create a graft. This graft is then sewn into the defect.



Conjunctival grafts can be either “island grafts”, in which a small “island” of conjunctiva is removed from around the eye and sutured into the defect, or they can be conjunctival “pedicle grafts”, in which the graft remains attached to a blood supply which can be useful in some forms of ulcer to speed healing. The bridge of a pedicle graft can be resected once the graft has taken into the cornea and the danger from infection or perforation has passed.

These conjunctival grafts are very effective at patching the defect and preventing loss of the eye, but they can lead to opacity in the cornea which can lead to reduced vision.

The best treatment to maximise vision following surgery is a corneo-conjunctival transposition. This operation splits the cornea next to the ulcer into a superficial and deeper layer, and slides the superficial layer into the area of the defect.



This is very demanding surgery as the cornea is only 1/2mm thick, and this

is then split into two layers each of about 1/4mm thick. This operation is very specialised in terms of microsurgical facilities, equipment and expertise, but provides an excellent prognosis for the eye and is the surgery most likely to lead to good vision in these post-operatively.

Descemetocoeles

These are a very deep ulcer which extends down to Descemet's membrane (see Corneal Ulcers). They are characterised by being very clear in the centre with no clouding in the deep area of the ulcer.

These ulcers are an extreme emergency as perforation leading to loss of the eye is imminent. The prognosis for these ulcers, however, is excellent following surgical intervention as described above for deep ulcers.

