



Corneal Sequestrum

What is a corneal sequestrum?

A sequestrum is an area of dead cornea (the cornea is the normally clear surface of the eye). Sequestra can range in appearance from a faint amber discoloration of the cornea to an area that is dark brown or black in color. This condition only occurs in cats, and is most common in the Persian, Himalayan, and other breeds with prominent eyes. Sequestra can cause pain, and many cats with sequestra will experience squinting and tearing.

What causes a sequestrum to form?

There are many possible causes for the development of a corneal sequestrum. In some cats, they result due to long-standing irritation to the cornea (the clear surface of the eye). This can occur for many reasons, including a corneal ulcer (an abrasion on the surface of the eye), entropion (in-rolling of the eyelids causing the hair on the lids to rub on the cornea), dry eye, or increased exposure of the eye (as in cats with large, prominent eyes). Another possible cause for corneal sequestra is infection with feline herpes virus. This is a common viral infection in cats that can cause conjunctivitis and corneal ulceration, as well as upper respiratory infection.

What is the treatment?

For many cats, the best treatment is surgery to remove the sequestrum. If it cannot be completely removed, there is a high risk of recurrence. For these cats, and for other cases with a higher risk for recurrence, or for those cats in which removing the sequestrum results in a deep corneal defect, a conjunctival flap may be placed. This involves harvesting a thin layer of conjunctiva (the pink, blood vessel-filled tissue overlying the whites of the eye) and suturing this flap over the area from which the sequestrum was removed.

Some sequestra will slough on their own with time. However, this can take weeks to months, or even longer. Although this avoids the expense of surgery and potential anesthetic risks, it can prolong the discomfort that is associated with sequestra. In addition, some sequestra extend deeply into the cornea, and when they slough they can leave a deep ulcer, or defect, in the cornea that could result in rupture of the eye.

Prognosis:

If the sequestrum can be completely removed at the time of surgery, or if it completely sloughs on its own, there is a good prognosis. Unfortunately, however, sequestra can be recurrent in some cats, and can potentially affect both eyes.