

Feline Corneal Sequestrum FAQs

UTCVM OPHTHALMOLOGY

What is a Corneal Sequestrum?

A corneal sequestrum is a pigmented spot on the cornea (the clear front part of the eye), ranging from a translucent amber discoloration to a dark raised black plaque. This condition appears to be unique to cats, but has rarely been reported in dogs and horses. The discolored area is dead tissue.

What causes a Corneal Sequestrum?

It appears that any chronic corneal irritation can lead to a corneal sequestrum. Potential causes of corneal irritation include trauma, non-healing ulcers, dry-eye syndrome, abnormal eyelid conformations (hairs rubbing on cornea), increased exposure (eyelids not closing all the way), decreased corneal sensation, and/or feline herpes virus may also play a role. Persian and Himalayan cats are predisposed indicating a genetic or hereditary component as well.

What happens to the Corneal Sequestrum after it develops?

The sequestrum starts as a faint brown discoloration and slowly progresses to black. Rarely, the cornea surrounding the sequestrum can become infected with bacteria and cause severe discharge and discoloration (yellow, white, blue) of the cornea. Corneal blood vessels often grow into the cornea to try and remove this dead tissue; thus the eye can start to look very inflamed at this stage.

What type of treatment options are available?

Medical therapy can be attempted to support the body's own attempt to remodel the cornea and expel the sequestrum (in which case it would "slough" off the corneal surface). This approach is less controlled because a sequestrum may take several weeks or months to slough and it can progress to become deeper through the tissue if the underlying issue is not resolved. Other times it occurs quickly and is an option for cats that show no signs of discomfort from the sequestrum.



A possible cause of corneal sequestrum is abnormal tear quality or quantity. The Schirmer Tear Test is the means of quantifying the amount of tears produced, as is being tested in this cat.

Surgery is recommended if cats are painful or to provide a more controlled outcome. Following removal of the sequestrum, often a graft will be placed into the cornea. The graft may not be perfectly clear but will often become less obvious over time. Recurrence of a sequestrum and/or development of a new sequestrum in a new area or the other eye is documented in up to 20% of patients after surgical management. Careful monitoring in the future with early intervention is recommended for the best outcome in cats that are predisposed to formation of corneal sequestra.