

Feline Eosinophilic Keratoconjunctivitis FAQs

UTCVM OPHTHALMOLOGY

Conjunctivitis and keratitis are common eye problems in all ages of cats. Conjunctivitis refers to the inflammation of the pink membranes surrounding the eye, whereas keratitis refers to the inflammation of the cornea (the clear front part of the eye). The corneal disease can be ulcerative or non-ulcerative but both can be painful. A number of infectious agents, namely viruses and bacteria, have been identified as potential underlying causes of these two conditions. Other causes include immune-mediated, allergic, and eosinophilic.

What is Eosinophilic Keratoconjunctivitis?

Eosinophilic keratoconjunctivitis (EK) is a condition in which the conjunctivitis and/or cornea becomes infiltrated with eosinophils (a type of white blood cell) and other types of inflammatory cells. Eosinophilic keratitis is caused by the immune system being over-stimulated, but the reason for this overstimulation is not always discovered. In some cases feline herpesvirus (FHV) infection is part of the equation.

What will the signs be if my cat has EK?

When the conjunctiva becomes inflamed, it can appear swollen and red. Thick, white discharge may be adherent to the tissue. If the cornea is also involved there will be ingrowth of red blood vessels, white deposits, corneal ulcers, etc. With eosinophilic infiltrate in the cornea can appear like white islands or be pink/white and "meaty". Application of fluorescein dye to the surface of the cornea will show whether a corneal ulcer is present. Other clinical signs seen along with keratoconjunctivitis include increased tearing, more frequent blinking, and holding the eye partially closed. This can occur in one or both eyes at the same time.

How do you diagnose EK?

The diagnosis of EK is usually made based on clinical signs and results of a scraping (cytology) taken from the affected tissue. Microscopic evaluation of the cells collected from the ocular surface reveal eosinophils in this disease.

What can I expect if my cat was diagnosed with EK?

Treatment includes topical anti-inflammatory medications such as steroids, cyclosporine, or tacrolimus. When used alone topical anti-inflammatories that can suppress the local immune system may exacerbate an underlying FHV infection. Therefore, topical anti-viral medications are also sometimes prescribed if there is suspicion of underlying FHV.

Complete resolution of signs can take a few weeks to months. Medications are reduced slowly over a period of several more weeks/months to minimize the risk of recurrence. However, recurrence does occur in many patients and low frequency, maintenance treatment may be warranted in order to maintain comfort and vision long term.



A classic appearance of eosinophilic keratoconjunctivitis with corneal blood vessels, pink bumpy tissue, and white plaques indicating inflammation of the cornea in this cat.