PAW HEALTH NETWORK INC.

DRY EYE

ABOUT THE DISEASE

Keratoconjunctivitis sicca (**KCS** or **Dry Eye**) is a condition that is caused by a decrease in tear production which then changes the natural composition of the tear film. Once this composition is altered, the cornea and external eye tissues are at risk for injury and inflammation.

Any condition that reduces the amount of tear production can technically result in **dry eye**. The most common causes are either immune-mediated damage of tear glands or allergic inflammation of the eye. Other conditions exist, such as canine distemper, feline herpes virus, hypothyroidism, and certain antibiotics. Please see the Canine Distemper Virus, Feline Viral Rhinotracheitis, or Hypothyroidism documents for additional information.

Symptoms often include:

- Squinting of the eyes (blepharospasms)
- Excessive production of mucus or lipid tear film, resulting in yellow discharge to accumulate around the eye.
    - Caregivers often mistake this as pus, when it is actually a buildup of thick tear components.
- Light sensitivity (photophobia)
- Corneal ulceration or erosion
    - Please see the Corneal Ulceration document for additional information.
- Corneal scarification
- Conjunctivitis

OBTAINING A DIAGNOSIS

A thorough clinical history and physical examination with a veterinarian will often yield a presumptive diagnosis.

A confirmatory test for decreased tear production is the Schirmer tear test. This will specifically measure the water/fluid component of tears when a sterile filter paper is placed directly on the eye. While this confirms decreased tear production, it does not necessarily provide a definitive diagnosis for underlying cause of **dry eye**.

TREATMENT

The goal of therapy is the return of normal tear function and/or replacement of tear film.

Topical medications are often frequently administered but will reduce in frequency as the patient begins to respond to management and as tear production increases. Treatment often includes:

- Artificial tears – Frequent supplementation required until tear production increases or returns.
- Cyclosporine – Immunomodulator which can help reduce immune destruction of tear gland tissues.
- Tacrolimus – An anti-inflammatory and immunosuppressant to reduce inflammation and immune destruction.
- Pilocarpine – Used in cases where neurologic **KCS** is suspected or diagnosed.

In severe cases, or those cases unresponsive to therapy, a surgery exists that re-routes a salivary gland duct to the eye to provide saliva as a replacement for tear film.

TIPS FOR SUCCESS

- Topical medications only work if they are applied; always continue medications until otherwise directed.