

## Dry Eye and Corneal Ulcers

## **Dry Eye**

Dry eye is a disease in dogs in which inadequate tear production causes inflammation of the cornea (the clear outer layer at the front of the eye). Dogs may have dry eye for a number of different reasons including immune-mediated destruction of their tear glands, endocrine diseases, infections, medication reactions, or neurologic disorders. Regardless of the cause, dry eye can be a painful and damaging condition.

Dogs with dry eye often have thick, mucus-like discharge and may squint or close their eyes frequently. Because the cornea is dry, it's prone to ulceration and scarring. A Schirmer tear test is often performed to evaluate your pet's level of tear production. If dry eye is suspected, artificial tears and additional eye medications to decrease inflammation of the tear ducts may be prescribed. As with any eye disease, evaluation by a veterinary ophthalmologist for definitive diagnosis and treatment recommendations is advised.

## **Corneal Ulcers**

A corneal ulcer refers to an open sore on the cornea (the clear outer layer at the front of the eye). Dogs can get corneal ulcers from trauma, as a result of other eye diseases, or due to underlying endocrine disease or infections. The cornea is made up of three layers and corneal ulcers can be classified by how many of those layers are involved (i.e. how deep the ulcer goes). Superficial ulcers may be treated with a combination of pain medication and antibiotic eye ointment to reduce the chances of a secondary infection. E-collars are often used as well, to prevent your pet from rubbing or scratching the eye and worsening the ulcer. A simple ulcer should heal within 1 to 2 weeks but must be monitored carefully for any signs of worsening.

Deeper ulcers are best managed by an ophthalmologist. In addition to those mentioned above, deep ulcers often require additional medications and careful monitoring. In severe cases, surgery may be advised to prevent rupture of the cornea.

In the case of a non-healing or recurrent ulcer, a consultation with a veterinary ophthalmologist is recommended as underlying eye diseases including dry eye or entropion (when the eyelids roll in) may be present. Until those conditions are treated, the ulcers may not heal. Non-healing ulcers may also require more intensive treatment including corneal debridement and a contact lens.

In all cases, pets with corneal ulcers must be monitored very carefully for signs of worsening pain, squinting, discharge, redness, or color change to the cornea (blue, yellow, or hazy tint).