

KERATOCONJUNCTIVITIS SICCA

KERATOCONJUNCTIVITIS SICCA is sometimes called “dry eye.” It is a condition in which tear production is decreased or sometimes even totally absent. This causes the outer layer of the eye (cornea) to dry out and become painful. Loss of vision can result.

Tears are produced from 2 major sources:

1. Tear glands positioned above each eyeball
2. Accessory glands distributed throughout the front of the eyes, including the eyelids

Inflammation or destruction of these tear glands can reduce tear production to such a low level that the eye begins to dry out.

CAUSES of this condition include trauma, drug toxicities, chemical irritations, viral infections, tumors, nerve degeneration, congenital defects where the dog is born without well-formed tear glands, and autoimmune reactions. In most cases, the exact cause cannot be determined. *There is evidence that up to 90% of KCS cases are related to a problem with the pet’s immune system. The role of the immune system is to protect against disease. In certain instances, the pet’s own immune system can mistakenly recognize parts of its own body as foreign invaders and set out to destroy them. In KCS, it is thought that the immune system may actually destroy the glands that are responsible for tear production, leaving the dog incapable of producing sufficient tears.*

CLINICAL SIGNS include frequent accumulation of mucus in the corners of the eye, reddened eyes, dry & dull cornea, squinting and rubbing the eyes, loss of transparency in the cornea, and possibly the presence of ulcers on the corneal.

DIAGNOSIS is based on clinical signs and results of the Schirmer tear test. This test involves placing a special strip of paper over the dog’s lower eyelids. After one minute, the amount of moisture absorbed by the special paper is measured and the results compared to known standards.

TREATMENT. The goal is to maintain adequate lubrication of the eye. This may be accomplished one of several ways:

1. Stimulation of tear production through the use of drugs that increase tear flow.
2. Replacement of tears using “artificial tears.”
3. Surgery to transpose the parotid salivary gland duct from the mouth to the eye so that the saliva from the gland can be substituted for tears.

Fortunately, now there is a new drug, cyclosporine, that is very effective in stimulating tear production in most pets. Although expensive, the cost / day is minimal because only 1-2 drops of the medication are needed for each treatment.

THIS CONDITION CANNOT BE CURED! HOWEVER, IT IS VERY EASILY TREATED AND CONTROLLED IN MOST PETS.