

KERATOCONJUNCTIVITIS SICCA (DRY EYE SYNDROME)

Your pet has been diagnosed with keratoconjunctivitis sicca (KCS), which is a disease of the tear secreting glands that results in reduction or lack of tear production. The superficial layers of the eye, including the cornea and conjunctiva, as well as the eyelids depend on tears for nutrition and protection. Without tears, these structures are highly susceptible to disease and trauma.

Some breeds of dogs, such as the American Cocker Spaniel, Miniature Schnauzer, Poodle, Shih Tzu, Lhasa Apso, Pug, Westhighland White Terrier, and English Bulldog are predisposed to this disease due to genetic factors. This clinical disease is also seen in felines (i.e. Persians). The causes of dry eye include immune-mediated, congenital, infectious (canine distemper virus), drug-induced (sulfa antibiotics, Etogesic, topical atropine), surgery-induced (removal of the tear gland of the nictitans) and neurogenic. A significant amount of canine cases tend to be immune-mediated and maintenance treatment is required for the life of the pet. Parotid duct transposition surgery can be considered if medical treatment fails to significantly increase the tear production.

The precorneal tear film is composed of three layers:

- 1) an outer oily layer, produced by the meibomian glands.
- 2) the aqueous layer, secreted by the lacrimal and accessory lacrimal gland.
- 3) the basal mucus layer, produced by the conjunctival goblet cells.

Important antibacterial enzymes are present within tears. The aqueous portion of the tears is measured by the Schirmer Tear Test (STT). Normal values should range from 15 to 25 mm/60 secs. Clinical disease is observed when the precorneal tear film falls below these values. Low STT values, along with commonly observed clinical signs, help point the ophthalmologist to a diagnosis. Some of the clinical signs include a thick mucopurulent discharge that accumulates on the eyelid margins and surface of the eye, red eyes, repetitive corneal ulcers, and excessive facial rubbing. As the disease progresses, blood vessels and pigment invade the cornea, and varying degrees of visual impairment may occur if not treated aggressively.

Our goals in the medical therapy of your pet are to:

- 1) improve lacrimal function
- 2) prevent ocular disease
- 3) improve patient comfort

Client compliance and follow-up visits are important in evaluating your pet's response to the medical therapy.

IMPORTANT: On the morning of the recheck evaluation, apply only topical drops to the eye(s) approximately 2 hours before the examination. Do not apply ointments to the eye(s) as they may interfere with the examination.

Please call (562) 943-3728 if you have questions regarding your pet. Your veterinarian will be sent a letter that summarizes the clinical findings and medical therapy so that your pet's record is complete.