



Matthew J. Chavkin, DVM, MS
— Diplomate American College of Veterinary Ophthalmology

Tanja Nuhsbaum, DVM, MS
— Diplomate American College of Veterinary Ophthalmology

Keratoconjunctivitis Sicca — "Dry Eye"

What is keratoconjunctivitis sicca?

Keratoconjunctivitis sicca (KCS) or "dry eye" is the failure of the tear glands to produce enough liquid tears to keep the eye moist and healthy.

What causes keratoconjunctivitis sicca?

The most common cause for KCS is thought to be an autoimmune reaction. The immune system launches a misdirected attack on the tear glands; the triggering event is unknown. Occasionally, certain drugs may induce a dry eye. In most instances, KCS is permanent and requires life-long treatment to prevent blindness and to avoid ocular discomfort.

Are certain breeds of dogs prone to keratoconjunctivitis sicca?

Yes. The American Cocker Spaniel, Bulldog, Lhasa Apso, Miniature Poodle, Shih Tzu and West Highland White Terrier are prone to KCS, although any breed of dog may be afflicted with KCS.

How can I recognize that my pet has keratoconjunctivitis sicca?

Most dogs with KCS will have a constant heavy, white-to-yellow discharge from the affected eye. A dry eye is more prone to bacterial infection, "pink eye" or conjunctivitis, which temporarily responds to treatment with antibiotic eye ointment. Eyes that are dry for several months develop corneal scarring and pigmentation, resulting in loss of vision.

How is keratoconjunctivitis sicca diagnosed?

A small strip of paper is placed in the conjunctival sac, and the amount of tears soaked up by the paper in one minute is measured. This test, known as the Schirmer tear test, is used to diagnose KCS and to measure response to treatment.

What is the treatment for keratoconjunctivitis sicca?

KCS is treated with medication or surgery. Medical treatment with Cyclosporin A (CsA) eye ointment or drops, twice daily in the affected eye, can reverse the autoimmune reaction and stimulates tear secretion. Approximately 8 out of 10 dogs treated with CsA eye drops will make more tears. If successful, CsA treatment is usually required for the life of your dog. If your dog does not respond to CsA eye drops, surgery may be recommended. A parotid duct transposition surgery involves re-routing the parotid salivary gland duct from the mouth to the eye, so that the eye is lubricated by saliva. This surgery frequently results in excessive tearing and, consequently, a wet face.

Regardless of the treatment chosen, KCS is a chronic problem that often requires long-term maintenance therapy.