



Dry Eye

Dry eye, called keratoconjunctivitis sicca (KCS), occurs in pets when the eye does not produce enough tears. It is a painful condition when untreated, though fortunately treatment is simple. However, treatment is life long since there is the no cure for dry eye.

Certain diseases and medications can cause KCS, but the most common cause is an immune-mediated condition that damages the tear glands.

Signs

Tears naturally coat the eye to keep it moist and to protect it from damage. A pet with dry eye is no longer able to produce this important tear film. Instead, the



body overproduces mucus in an attempt to moisten and protect the eye. Unfortunately, this doesn't work well. The eye ends up dry, red, and irritated with heavy

mucous.

A dry eye is much more likely to develop ulcers, an open sore on the cornea (the tissue covering the front of the eye). These are painful and cause your pet to squint and rub the eye.

Diagnosis



Tear production is checked with a Schirmer Tear Test (STT), a relatively simple procedure. It uses a small paper strip with measurements and a blue dye.

The tip is placed under the lower eyelid. The paper absorbs tears and the moisture turns it blue. The tears move along the strip, and where the tears stop in 1 minute is the measurement of tear production.

Normal tear production is 15 mm or more. Anything below 10 mm is considered dry eye if the pet has signs consistent with it.

RESULT INTERPRETATION



15-25mm = Normal range



10-14mm = Suspect low tears



<10mm = Inadequate tears

The doctor will then want to check for ulcers on the eye by applying a small amount of dye to the eye. Only a disruption of the cornea (a scratch or ulcer) will pick up the dye. It will wash right off of a healthy eye. Ulcers require treatment with antibiotic drops and possibly medicine to relieve pain. Most ulcers heal within a week as long as the eye is moist.

Treatment

For most pets, dry eye is easy to treat. Drops are available to help stimulate tear production by altering the immune system that is causing the dry eye. These drops, cyclosporine or tacrolimus, are usually given once or twice daily indefinitely. If they are not given, the signs of dry eye will reoccur within a week.



4-6 weeks after starting the medicine, the doctor will recheck the tear production using another STT to make sure the medicine is working. Sometimes, the dose or medicine may need to be changed. Once the eyes are responding well to the medicine, the eyes should be examined every 6 months.