Background

- Dry eye (keratoconjunctivitis sicca) is a devastating disease that causes ocular pain and potentially blindness. It is seen more frequently in West Highland White Terriers in comparison to many other breeds. We are interested in identifying the genetic components of this disease as well as characterizing this disease better with examination and testing of the tear film and ocular surface and in select patients using advanced imaging techniques.

Participation Requirements

- West Highland White Terriers with Dry Eye Syndrome or with no ocular abnormalities (over 7 years old)

Procedures

- Routine ophthalmic examination and tear film tests
- Blood collection for DNA analysis
- Tears will be collected from the conjunctival sac using a blunt-tip needle attached to a syringe from both eyes. Tear collection will be performed at a separate time from the initial ophthalmic examination and tests.
- Conjunctival biopsy, which involves the removal of a small piece of conjunctiva from inside the lower eyelid under anesthesia.
- Select patients may receive advanced imaging (including spectral domain optical coherence tomography, confocal biomicroscopy and digital slit lamp photography) that involves administration of a mild sedative.

Benefits

- There is no cost to you for your participation in this study.
- Your dog will receive a very thorough eye examination at no charge.
- If a corneal ulcer occurs at the time of evaluation, the cost of medications, recheck examinations, and procedures (e.g., cotton-tipped applicator or Diamond burr debridement, grid keratotomy) will be performed at no cost to you if they are performed at UC Davis.
- If a surgical procedure is required, you will receive $200 of compensation towards the procedure if it is performed at UC Davis.
- If your dog has KCS, you will be compensated for taking part in this study with 2 months worth of immunosuppressive medication (e.g., cyclosporine/tacrolimus) ointment or drops.
- The study will also cover the costs of any complications from the sedation, blood sampling or imaging up to $200.
- Results from this study will allow us to better predict the onset and progression of this disease.
- If a gene that causes this disease is found, then we may be able to develop a genetic test to know which dogs do or do not have this disease.

Owner Responsibilities

- You will need to cover any costs due to complications from sedation, blood sampling, or examination (including corneal ulceration) beyond the $200 that the study will cover.
- We ask that you do not administer any medications to treat your dog’s dry eye for one week prior to the appointment other than lubricant provided to you.