

VETERINARY TECHNICAL DATASHEET

Ligneous Membranitis



Mutation Found In :Scottish Terrier

Disorder Type

- Skin

Disease Severity

- Severe

Background

Ligneous membranitis is a rare hereditary inflammatory disease of the mucous membranes, caused by a plasminogen deficiency. The disease is chronic and causes progressive ulcerative conjunctivitis (inflammation of the tissues around the eye), stomatitis, and gingivitis. A causative mutation for the disease has been found in Scottish Terriers.

Key Signs

- Ulcerative conjunctivitis
- Ulcerative stomatitis
- Ulcerative gingivitis

Clinical Description

Clinical signs of ligneous membranitis include progressive oral and ocular inflammatory lesions which occur within the first few weeks to months of life. Affected dogs may have ulcerative inflammation in the mouth and the conjunctiva of the eyes. Other clinical signs include nasal discharge, loud respiratory sounds, and enlarged lymph nodes. Blood work may show neutrophilia, proteinuria, and hypoalbuminemia as well as low plasminogen activity. Affected dogs may have inflammatory fibrinous changes in the trachea, larynx, and in the thoracic and abdominal cavities.

Mode of Inheritance

- autosomal recessive

Gene Name

- PLG

Next Steps

The prognosis for affected dogs with this condition is poor. Euthanasia is often elected for surviving puppies due to welfare concerns.

References

Ainsworth S, Carter S, Fisher C, Dawson J, Makrides L, Nuttall T, Mason S. Ligneous membranitis in Scottish Terriers is associated with a single nucleotide polymorphism in the plasminogen (PLG) gene. Anim Genet. Dec;46(6):707-710, 2015.