VETERINARY TECHNICAL DATASHEET

Dilated Cardiomyopathy, (DCM); mutation originally found in Standard Schnauzer

Mutation Found In :Schnauzer (Standard)

Disorder Type

- Heart

Disease Severity

- Moderate/severe

Background

Dilated cardiomyopathy (DCM) is a cardiac disorder that is seen in many breeds. The disorder results in an enlarged heart and thin heart muscle. These changes result in the heart's diminished ability to serve as a pump, leading to heart failure. Typical clinical signs of this condition are caused by congestive heart failure.

Key Signs

- Cardiac enlargement
- Poor myocardial contractility
- Arrhythmia
- Congestive heart failure
- Sudden cardiac death

Clinical Description

Dogs affected by this disorder have an enlarged heart and thin heart muscle. The clinical signs of cardiac failure are exercise intolerance, persistent cough, breathing difficulties, and swelling of the abdomen (ascites). DCM is also characterized by arrhythmias which can cause sudden cardiac death without any previous clinical signs. Diagnosis is based on a cardiac ultrasound examination. ECG and thoracic X-rays may also be performed. Arrhythmias may be the first sign of the disease.

Mode of Inheritance

- autosomal recessive

Gene Name

- Confidential

Next Steps

If the dog has been diagnosed as possessing a higher risk of developing dilated cardiomyopathy, the dog should be examined once a year by a veterinarian, preferably a cardiologist. Holter examinations may be used in asymptomatic dogs since arrhythmias may be the first clinical signs of the disease.

There is no curative treatment for the disease. Affected dogs are treated symptomatically with antiarrhythmic medications and medications treating cardiac failure. Stress must be avoided.

References

Gilliam DH. Molecular Genetic Studies of Canine Inherited Diseases Including SAMS, Neuronal Ceroid Lipofuscinosis and Dilated Cardiomyopathy. PhD dissertation. University of Missouri, 2016.