Von Willebrand Disease (vWD)

Description

Von Willebrand disease (vWD) is caused by plasmatic von Willebrand factor (vWF) insufficiency. VWF is a blood glycoprotein (not enzyme) important for blood coagulability.

Its primary function is to bind itself to other proteins, and also facilitates aggregation and adhesion of the trombocytes to wound site. The deficiency or failure of vWF function causes bleeding which is most apparent in tissues having high blood flow shear in narrow vessels. VWD manifests oneself as a tendency to bleeding from skin and tissues. The disease can be inheritable or acquired.

VWD type I, the type that occurs in the Coton de Tulear, is the most frequent occurring and the least serious form of vWD. It is inherited autosomal recessively. The disease is characterized by low plasma vWF concentration and normal vWF protein structure.

Symptoms

Most affected animals have few if any symptoms. Dogs with mild to moderate forms of the disease may not be diagnosed for years. Severe forms of vWD usually become apparent by about one year of age and typically include one or more of the following symptoms:

- Recurrent episodes of spontaneous bleeding from the gums or oral mucosa, for no apparent reason
- Recurrent episodes of spontaneous nosebleeds, for no apparent reason
- Gastrointestinal bleeding
- Bloody stool (hematachezia) or urine (hematuria)
- Prolonged bleeding from tail docking, ear cropping, dewclaw removal, from superficial wounds, surgical incisions, during heat cycles in intact bitches or excessive bleeding during whelping
- Anemia (regenerative)

Light injuries that occur during routine play can cause the joints of affected dogs to bleed, and as a result the dog may become lame. Owners may notice prolonged bleeding when they trim their dog's nails, despite the application of a quick-stop or other clotting powder.

Treatment

The best treatment for dogs with vWD is to give them a blood transfusion.

Test method

Testing is a DNA test through blood or swab and is through VetGen. OFA registers the test results if requested by the client.

http://vetgen.com/WebOrdering.html

Genetic/breeder information

The mutation is inherited autosomal recessively, which means that the disease occurs only in individuals, who inherit mutation from both biological parents. The individuals with one mutated allele are disease carriers without any clinical symptoms.

Stats within CdT breed

Only 8 vWD test results have been filed with the OFA which does not provide enough data on the actual status of this disease within the Coton de Tulear at this time.

Source of data

http://www.genomia.cz/en/test/78

http://www.petwave.com/Dogs/Health/Von-Willebrand-Disease/Symptoms.aspx