VETERINARY TECHNICAL DATASHEET

von Willebrand's Disease, type 2 (discovered in the German Wirehaired Pointer)

Mutation Found In :German Wirehaired Pointer, German Shorthaired Pointer

Disorder Type

- Blood

Disease Severity

- Moderate

Background

The clotting pathway is a complex process. The vWF glycoprotein complexes with factor VIII and both are required for platelet adhesion and preventing the rapid clearance of factor VIII. Von Willebrand's disease (vWD) is a bleeding disorder affecting multiple breeds and several genetic variants have been characterized. Type 2 vWD affects several breeds, but the mutation tested here has been found to only be predictive of the risk of developing the condition in German Shorthaired Pointers and German Wirehaired Pointers. The disease causes moderate to severe bleeding tendency due to low level and abnormal structure of von Willebrand's factor. The mode of inheritance is autosomal recessive.

Key Signs

- Severe bleeding tendency

Clinical Description

Type 2 von Willebrand's disease is a moderate to severe clotting disorder. Typical symptoms include mucosal bleeding, such as epistaxis, bleeding from the gums, gastrointestinal bleeding, and blood in the urine. Exceptionally excessive and prolonged bleeding may be observed after a trauma or surgery, and spontaneous bleeding may also be encountered. This condition can lead to death if untreated. Most affected dogs will have a normal PT/aPTT but have prolonged bleeding. When assayed, these dogs have low levels of vWF present; specific vWF factor can be assayed at a reference laboratory. Performing a functional test like a buccal-mucusal bleeding time prior to surgery is recommended.

Mode of Inheritance

- autosomal recessive

Gene Name

- VWF_Type 2

Next Steps

Therapy is limited to supportive care (which can include transfusions if needed) and avoiding surgery. Performing a functional test like a buccal-mucusal bleeding time prior to surgery is recommended.

References

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