VETERINARY TECHNICAL DATASHEET

Factor IX Deficiency or Hemophilia B; mutation originally found in Lhasa Apso

Mutation Found In :Lhasa Apso

Disorder Type

- Blood

Disease Severity

- Moderate

Background

Hemophilia B is a blood disorder encountered in several breeds and is related to a factor IX deficiency. The disease follows an X-linked mode of inheritance. Given males only have one X chromosome, the condition is seen most commonly in males as a single affected copy will cause the condition; females require two copies to exhibit the condition.

Key Signs

- Excessive or life threatening bleeding

Clinical Description

Blood coagulation is a complex process. Factor IX is one of the proteins necessary for blood coagulation and its deficiency causes hemophilia B in an affected dog. Hemophilia B is a milder blood disorder than hemophilia A, but it may still cause life-threatening bleeding. Specific factor assay may be measured by a reference laboratory. Prior to surgery or invasive procedures, a prothrombin (PT) and partial thromboplastin time (PTT) should be measured. Additional supportive measures, including transfusions, may be necessary. Excessive and prolonged bleeding may be observed during tooth extractions, routine surgeries, and even minor traumas. The condition is usually more severe for active dogs of large size.

Mode of Inheritance

- X-linked

Gene Name

- FIX

Next Steps

Prior to surgery or invasive procedures, a prothrombin (PT) and partial thromboplastin time (PTT) should be measured. Affected dogs should be monitored closely for excessive and prolonged bleeding during and after any required surgical procedures or after any trauma. Blood or platelet transfusions should be provided as necessary to ensure proper clotting if other means are unsuccessful. If multiple transfusions are needed, then it is good to measure the inhibition of factor IX activity which, if present, may require increased transfusion therapy or potentially concurrent corticosteroid treatment.

References

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