

VETERINARY TECHNICAL DATASHEET

Factor XI Deficiency



Mutation Found In :Kerry Blue Terrier

Disorder Type

- Blood

Disease Severity

- Moderate

Background

Factor XI deficiency is a hereditary disorder that impacts blood coagulation. Many affected dogs remain asymptomatic. The disease usually causes a mild, spontaneous bleeding disorder but more severe bleeding may occur following surgery. The disorder affects the Kerry Blue Terrier breed. It has also been found in some lines of the Great Pyrenees and English Springer Spaniels. The mode of inheritance is autosomal dominant with incomplete penetrance.

Key Signs

- Bloody urine
- Gingival bleeding
- Nose bleed
- Severe bleeding after surgery or trauma

Clinical Description

The disorder is caused by the deficiency of the intrinsic clotting factor XI which leads to abnormally slow clot formation at the site of vascular injury. In most cases, the disorder causes mild, spontaneous bleeding which may present as hematuria (blood in the urine), gingival bleeding, or epistaxis (bleeding from the nose). Many affected dogs may also remain asymptomatic. The disorder can sometimes cause severe, life-threatening bleeding 12 to 24 hours after surgical intervention. Excessive bleeding may also occur after trauma.

Mode of Inheritance

- autosomal dominant

Gene Name

- FXI

Next Steps

Affected dogs should be monitored closely for excessive and prolonged bleeding during and after any required surgical procedures or after any trauma. Fresh-frozen plasma transfusions should be provided as necessary to ensure proper clotting if other means are unsuccessful.

References

Tcherneva E, Giger U. Molecular base of coagulation Factor XI deficiency in Kerry blue terrier. Bulg. J. Vet. Med., 10, No 4, 247-255, 2007.