

VETERINARY TECHNICAL DATASHEET

Hyperuricosuria, (HUU)



Mutation Found In :Bulldog (American), American Pit Bull Terrier, American Staffordshire Terrier, Australian Shepherd, Black Russian Terrier, Boerboel, Bulldog (Standard), Dalmatian, German Shepherd Dog, German Spitz, Schnauzer (Giant), Russell Terrier, Labrador Retriever, Lagotto Romagnolo, Munsterlander (Large), Miniature American Shepherd, Mixed breed, Parson Russell Terrier, Pomeranian, Spanish Water Dog, Wirehaired Vizsla, Weimaraner

Disorder Type

- Urinary

Disease Severity

- Moderate

Background

Hyperuricosuria (HUU) is an inherited disorder in dogs that can cause hyperuricemia and predisposes affected dogs to the development of urolithiasis (urate stones) in the kidneys and bladder. The disease is very common in Dalmatians but is seen in several other breeds as well.

Key Signs

- Urolithiasis
- Hyperuricemia

Clinical Description

HUU predisposes affected dogs to the formation of urate stones. Clinical signs of urolithiasis include hematuria, pain while urinating, and blockage of the urinary tract. Patients with urinary stones are more susceptible to urinary tract infections. Blockage of the urinary tract is a life-threatening condition that requires immediate veterinary care. In Dalmatians, the clinical signs are more common in males than in females. As much as 34% of all male Dalmatians are diagnosed with urate stones.

Mode of Inheritance

- autosomal recessive

Gene Name

- SLC2A9

Next Steps

The condition can be partly managed through diet therapy. Dietary options and the importance of diet management, as well as, signs of urinary tract infection or blockage should be emphasized to clients.

References

Bannasch D, Safra N, Young A, Karmi N, Schaible GV, Ling GV. Mutations in the SLC2A9 Gene Cause Hyperuricosuria and Hyperuricemia in the Dog. PLoS Genet 4(11):e1000246, 2008.