VETERINARY TECHNICAL DATASHEET

Rod-Cone Dysplasia 1a, (rcd1a); mutation originally found in Sloughi

Mutation Found In :Sloughi

Disorder Type

- Eye

Disease Severity

- Moderate

Background

Rod-cone dysplasia 1a (rcd1a) in Sloughis is an inherited eye disorder that causes photoreceptor degeneration that results in blindness. It is inherited in an autosomal recessive manner.

Key Signs

- Night blindness
- Loss of vision
- Blindness

Clinical Description

The first clinical signs of rcd1a include night blindness from rod cell degeneration and can be detected in affected dogs at 2 to 3 years of age. Disease progression may be slow, but eventually the disorder will progress as the cone cells also degrade, impairing day vision, and eventually results in complete blindness.

Mode of Inheritance

- autosomal recessive

Gene Name

- PDE6B

Next Steps

A blind dog tends to adapt well to the loss of vision. However, some dogs may exhibit a tentativeness when introduced to unknown environments because their vision is compromised. Occasionally, they may react abruptly (snapping) if they are startled so caution and use of verbal queues should be taken when handling a blind dog. Caretakers should take precautions to protect the blind dog from threats it cannot detect (ex. cliffs, sharp points on furniture, moving vehicles).

References

Dekomien G, Runte M, Gödde R, Epplen JT. Generalized progressive retinal atrophy of Sloughi dogs is due to an 8-bp insertion in exon 21 of the PDE6B gene. Cytogenet Cell Genet 90:261-267, 2000.