

Sudden Acquired Retinal Degeneration Syndrome

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In the literature

Washington DR, Li Z, Fox LC, Mowat FM. Canine sudden acquired retinal degeneration syndrome: owner perceptions on the time to vision loss, treatment outcomes, and prognosis for life. *Vet Ophthalmol.* 2021;24(2):156-168.

FROM THE PAGE ...

Sudden acquired retinal degeneration syndrome (SARDS) is a blinding disease in dogs that leads to irreversible death of retinal photoreceptors. Blindness is thought to have a rapid onset, but loss of vision might stretch over several weeks. The exact pathogenesis of SARDS is unknown. SARDS has been considered incurable, although treatment with a variety of drugs (including systemic corticosteroids, immunoglobulins, and immunosuppressants) has been attempted. Counseling pet owners whose dogs receive this diagnosis can be difficult because of controversial and conflicting information regarding treatment benefits and outcomes.

In this study, an online questionnaire was provided to owners of dogs with an electroretinography-confirmed SARDS diagnosis. Participants ($n = 434$) answered questions about onset of vision loss, treatment benefits, adverse effects, and prognosis. Most owners (65.4%) reported <2 weeks of vision disturbance to complete vision loss. Partial or full vision recovery after any form of treatment was noted in 8.7% of responses. A combination of drugs was more effective than a single drug. Most dogs experienced either mild (48.6%) or severe (6.7%) adverse effects during treatment. A diagnosis of SARDS did not appear to shorten life expectancy in affected dogs; however, a higher number of purebred dogs with SARDS had kidney disease, respiratory disease, and pancreatic disorders at the time of death than did an age- and breed-matched reference population.

... TO YOUR PATIENTS

Key pearls to put into practice:

- 1 Dogs with SARDS are typically presented with sudden (<2 weeks) loss of vision. Crossbreed dogs, dachshunds, pugs, and miniature schnauzers, as well as middle-aged dogs, are overrepresented. The pupils are usually dilated and minimally responsive during initial examination; however, the retina appears normal. Diagnosis should be confirmed via electroretinography, which typically shows extinguished retinal function.
- 2 Many owners reported that, apart from blindness, their dogs showed systemic clinical signs consistent with hyperadrenocorticism (eg, polyphagia, weight gain, polyuria, polydipsia, liver enzyme elevation) suggestive of adrenocortical axis disturbance in dogs with SARDS. This study also revealed clinical signs (eg, sleep disturbance, worsening of coat condition, loss of smell, loss of hearing) not previously reported.
- 3 Owners should be counseled about the risks and benefits of SARDS treatment because of the reported low success rates and likely significant adverse effects. Blind dogs with SARDS can have a normal life expectancy and good quality of life.

Suggested Reading

- Komaromy AM, Abrams KL, Heckenlively JR, et al. Sudden acquired retinal degeneration syndrome (SARDS) - a review and proposed strategies toward a better understanding of pathogenesis, early diagnosis, and therapy. *Vet Ophthalmol.* 2016;19(4):319-331.
- Montgomery KW, van der Woerd A, Cottrill NB. Acute blindness in dogs: sudden acquired retinal degeneration syndrome versus neurological disease (140 cases, 2000-2006). *Vet Ophthalmol.* 2008;11(5):314-320.
- Stuckey JA, Pearce JW, Giuliano EA, et al. Long-term outcome of sudden acquired retinal degeneration syndrome in dogs. *J Am Vet Med Assoc.* 2013;243(10):1425-1431.