

SARDS CASE REPORT #5

Concurrent elevations in cortisol and total estrogen in a dog affected with Sudden Acquired Retinal Degeneration Syndrome (SARDS)

Caroline D. Levin RN
18709 S. Grasle Road
Oregon City, OR 97045
Phone/fax: 503-631-3491

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Objective: To describe the laboratory findings, hormone replacement therapy, and outcome of one dog affected with Sudden Acquired Retinal Degeneration Syndrome (SARDS). **Animal studied:** A 9-year-old, spayed female Labrador Retriever-mix diagnosed with SARDS by a certified veterinary ophthalmologist on November 24, 2006. The owner reported a history of vision loss and signs consistent with elevated adrenal activity, including PU/PD, PP, obesity, lethargy, insomnia, confusion, and excessive panting. Time since onset = one week. **Procedure:** An endocrinology and immunology (E&I) panel (National Veterinary Diagnostic Services, Quail Valley, CA) indicated elevated levels of both cortisol and total estrogen; and below normal levels of IgA, IgG, and IgM. T3 and T4 fell within the bottom 15% of normal range. The general practice veterinarian initiated hormone replacement therapy with triamcinolone acetate injectable glucocorticoid (Fort Dodge Laboratories). This was followed by low-dose oral methylprednisolone (Vintage Pharmaceuticals), oral levothyroxine (Lloyd, Inc.) and sulfasalazine (Mutual Pharmaceuticals) the latter to improve GI absorption. The E&I panel was repeated after one month. **Results:** Both cortisol and total estrogen levels demonstrated a decline toward the normal range. T3 and T4 levels rose toward the mid-normal range. The owner reported significant improvement in clinical signs of obesity, lethargy, insomnia, confusion, and panting. **Conclusion:** Low-dose glucocorticoid and thyroid hormone replacement had a positive effect on both clinical presentation and laboratory findings in this SARDS-affected dog.

Table 1. Comparison of endocrinology and immunology panels

Hormone	Initial results	One month follow-up results	Normal range
Cortisol	3.18	2.71	1.00-2.50 ug/dL
Total estrogen	35.31	35.09	30.00-35.00 pg/mL(females)
T3	108.94	117.82	100.00-200.00 ng/dL
T4	2.27	2.74	2.00-4.50 ug/dL
IgA	43	58	70-170 mg/dL
IgG	918	1077	1,000-2,000 mg/dL
IgM	88	98	100-200 mg/dL