

UTILITY OF SERUM AMYLOID A (SAA) CONCENTRATIONS IN CATS WITH AELUROSTRONGYLUS ABSTRUSUS TO DETERMINE SEVERITY AND PARASITE LOAD

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Background and aims

Feline aelurostrongylosis (*Aelurostrongylus abstrusus*) is characterized by inflammatory cell infiltrates in bronchi and lung parenchyma. Serum amyloid A (SAA) is a major acute phase protein in the cat and has shown utility as a prognostic indicator. Its adequacy to evaluate the severity of aelurostrongylosis has not yet been demonstrated, so the aim was to determine concentrations of SAA in cats with *A. abstrusus*.

Methods

SAA was measured in serum from 8 symptomatic cats infected by *A. abstrusus*, detected on Baermann examination. Cats were grouped into low (n=3; <1000 larvae/gram of feces) and high parasite load (n=5; >1000 larvae/gram of feces). To determine the clinical status of the patients, thoracic radiographs, a complete blood count and biochemistry were performed

Results

Cats with high parasite load showed pathological values of SAA (1826±1282 mcg/mL); furthermore, monocytosis was present in all hematological exams. Cats with low parasite load showed normal concentrations of SSA (<5 mcg/mL) and normal blood count. No anomalies were found in the biochemical analysis in any of





the cats. A marked severe broncho-interstitial pattern and focal alveolar pattern were observed in thoracic x-rays of cats with high burden, and a mild-moderate broncho-interstitial pattern in cats with low burden.

Conclusions

SAA may be a reliable biomarker to determine lung inflammation and severity of infection in cats with high parasite load. The results indicate that lung inflammation in cats with a low parasite load may not be significant, although all cats studied showed clinical signs related to aelurostrongylosis. These are preliminary results and a higher number of cats are being studied to determine the real utility of SAA.





1. Tamamoto T, Ohno K, Takahashi M, Nakashima K, Fujino Y, Tsujimoto H. Serum amyloid A as a prognostic marker in cats with various diseases. Vet Diagn Invest. 2013 May; 25(3):428-32.







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