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## IDIOPATHIC GRANULOMATOUS VASCULITIS (SARCOIDOSIS) IN A BLACK RHINOCEROS (*Diceros bicornis minor*)

Michelle Campbell-Ward, BVSc, DZooMed, MANZCVS,<sup>1\*</sup> Benn Bryant, BVSc, MVS, MACVSc,<sup>1</sup> and Cheryl Sangster, DVM, MVSc, Dipl ACVP<sup>2</sup>

<sup>1</sup>Taronga Western Plains Zoo, Dubbo, NSW, 2830, Australia; <sup>2</sup>Taronga Zoo, Mosman, NSW, 2088, Australia

### Abstract

A 20-yr-old male captive-born black rhinoceros (*Diceros bicornis minor*) presented with a relatively acute onset of lethargy and profuse watery diarrhea following a 5-mo period of weight loss. Fecal parasitology and culture failed to reveal any pathogens, and repeated clinical assessment over the following month suggested a protein-losing enteropathy.

Treatment for suspected inflammatory bowel disease commenced including intravenous colloid and crystalloid fluid infusions, dietary manipulation, oral psyllium, bismuth subsalicylate, oral ranitidine and probiotics. After 1 mo with only slight improvement, dexamethasone (0.06-0.08 mg/kg i.m. s.i.d.) was given for 2 days followed by a prolonged tapering course of oral prednisolone (initially at 0.8 mg/kg s.i.d. tapered in 25% increments over a period of 6 wk to 0.2 mg/kg e.o.d.). There was a noticeable clinical response to corticosteroids with improvements in demeanor, fecal consistency, serum albumin levels and body weight. The medication was discontinued 3 mo after presentation and clinical signs recurred within 1 wk. Recommencement of the corticosteroid therapy led to a temporary clinical improvement. The rhinoceros was euthanized 6 mo after presentation due to an eventual waning of the response to treatment.

Post-mortem examination revealed multiple, large, firm, coalescing nodules in the lung, kidney, spleen and lymph nodes. Histological examination confirmed these nodules to represent granulomatous inflammation, typically focused on vascular structures. An extensive search for potential causative organisms was undertaken but none were found. Idiopathic granulomatous vasculitis (sarcoidosis) has not been reported before in a black rhinoceros but it is considered an emerging disease in domestic horses.<sup>1</sup>

**Key words:** Black rhinoceros, *Diceros bicornis*, idiopathic granulomatous vasculitis, sarcoidosis

### LITERATURE CITED

1. Sloet van Oldruitenborgh-Oosterbaan MM, Grinwis GCM. Equine sarcoidosis. *Vet Clin North Am Equine Pract.* 2013;29:615-627.