
FRONTAL SINUSITIS AND EPISTAXIS IN CAPTIVE BLACK RHINOCEROS (*Diceros bicornis*)

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Abstract

Epistaxis in captive black rhinoceros is a common event with 20% of captive black rhinoceros in North America reported to have experienced this syndrome.¹ Attempts to find the source can be frustrating, but if found are potentially amenable to cryosurgery.² A 15-yr-old male black rhinoceros had several episodes of the clinical entities (weight loss, anemia, lameness, elevated fibrinogen, and elevated ferritin.) noted in black rhinoceros for several years. Clinical resolution was achieved with the use of 200 mg warfarin p.o. s.i.d for months and all parameters improved with the appetite and lameness returning to normal. Epistaxis developed and the warfarin was discontinued but with the clinical signs all returned. Several courses of warfarin were re-instituted but each attempt resulted in severe epistaxis even with clinical improvement. Standing radiographs of the sinuses was unproductive in identifying isolating the source of the epistaxis. The rhinoceros was euthanatized and upon necropsy, the frontal sinus was explored. Bony hyperplasia and a growth of *Aspergillus* sp. was documented. The remaining nasal passage was normal. This lesion was unreachable with a flexible endoscope and would have gone undetected had that diagnostic approach been used. *Aspergillus* has been well documented in captive black rhinoceros.⁴ Lesions have only been described in the lungs and trachea; it is uncertain if sinuses, particularly the frontal sinus was examined. Warfarin was a usefeul adjunct in the clinical management of this case and was chosen because it is believed that micro-emboli have a role in many of the clinical signs seen in captive black rhinoceros. The resolution of the lameness, presumably due to laminitis as seen in other black rhinoceros,³ supports this notion. Based on the lowering of the fibrinogen and ferritin, warfarin appears to be acting as an anti-inflammatory as well. Computed tomography of this skull has provided a basis for an ongoing retrospective evaluation of rhinoceros with epistaxis without a known source.

LITERATURE CITED

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