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## VITILIGO IN A SUB-ADULT EASTERN BLACK RHINOCEROS (*Diceros bicornis michaeli*)

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### Abstract

In the United States, skin disease is a major cause of morbidity in the adult black rhinoceros (*Diceros bicornis*) population.<sup>1,2</sup> While the majority of dermatologic conditions in black rhinoceroses appear to be secondary, this case represents a primary dermatopathy. A captive born, female, sub-adult, eastern, black rhinoceros (*Diceros bicornis michaeli*) began to develop areas of depigmentation around her nares at 2 yr of age. The depigmentation progressed over the next 12 mo to include facial fold crypts, interdigital skin, lip, ventral abdomen, ventral neck, axilla, lateral brachium and antebrachium, lateral thigh, ventral tail and perineal region. The symmetric, multifocal, depigmented macules are flat, non-ulcerated, non-puritic and, other than the color change, appear grossly normal. Complete blood counts, serum chemistry panels, ANA testing and select endocrine panels have been performed and appear within normal limits. Facial fold skin biopsies performed under behavioral restraint and site-specific analgesia were obtained and submitted for histopathology and bacterial culture. Histopathology revealed multifocal hypopigmentation with melanin incontinence, epidermal edema, lymphocytic exocytosis and mild perivascular lymphohistiocytic dermatitis. Microbiology results from the biopsies demonstrated presumed normal skin flora. The gross appearance and histopathologic changes of these lesions are most consistent with a diagnosis of vitiligo. Skin biopsies obtained from clinically normal conspecifics demonstrated normal histology except for the paternal relative. Due to the rare occurrence of vitiligo in non-domestic animals, this case represents an interesting addition to the already reported dermatopathies in captive black rhinoceroses.

### LITERATURE CITED

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