ALLERGEN TESTING IN TWO RELATED ONE-HORNED RHINOCEROSES (*Rhinoceros unicornis*) WITH SEASONAL DERMATITIS

Sarah B. Chaney, DVM, PhD, DACVP,[1]* Melissa Loewinger, DVM,[3] Donna Doherty,[2] Colleen M. McCann, PhD,[2] Kenneth J. Conley, DVM, DACVP,[1] Denise McAloose, VMD, DACVP,[1] Andrew Rosenberg, DVM, Dipl ACVD,[3] and John M. Sykes IV, DVM, Dipl ACZM[1]

[1]Wildlife Conservation Society, Zoological Health Program, Bronx, NY 10460 USA; [2]Wildlife Conservation Society, Bronx Zoo, Bronx, NY 10460 USA; [3]Animal Dermatology and Allergy Specialists, White Plains, NY 10607 USA

Abstract

Skin diseases of rhinoceroses are common but descriptions are primarily limited to diseases of black and white rhinoceroses (*Diceros bicornis* and *Ceratotherium simum*).[1-3,5] Allergic dermatitis was diagnosed in a 25-yr-old female *Rhinoceros unicornis* and her 6-yr-old female offspring by skin biopsy, intradermal skin (IDST) and allergen specific serum IgE testing. Dam and offspring presented with seasonal, ulcerative dermatitis affecting the face, legs and trunk starting at 6 and 2 yr of age, respectively. Symptomatic treatment included systemic (oral antibiotics, antihistamines, steroids, pentoxifylline) and topical (steroid and antibiotic ointments and antiseptic shampoos and sprays) therapies, but the condition worsened over time. Specific allergen testing was then pursued during a single standing sedation using transmucosal or injectable detomidine. IDST was performed just caudal to the pinnal base using controls (sterile saline and histamine phosphate) and 61 regionally specific allergens. This anatomic location produced adequate visualization and skin thickness to immediately evaluate for intensity of reaction (wheal size, erythema, turgidity). Specific serum allergen responses were detected in each animal using Heska's Equine ALLERCEPT® Allergen Panel.[a] Histopathology of the affected skin was consistent with an allergic etiology: chronic eosinophilic dermatitis. Based on protocols developed in horses,[4] injectable allergen-specific immunotherapy has been initiated in these animals. This is the first reported use of IDST and serological allergen testing in rhinoceroses, detailing feasibility for future studies to aide in the diagnosis and treatment of allergic dermatopathies.

[a]Allercept Allergen Panel, HESKA Veterinary Diagnostic Laboratories, Loveland, Colorado 80538, USA

Key words: Allergic dermatitis, biopsy, Heska equine allergen panel, intradermal skin testing, rhinoceros, *Rhinoceros unicornis*

ACKNOWLEDGMENTS

The authors thank the veterinary and histology technicians of the Zoological Health Program and the senior keepers in the Mammal Department for their assistance in the success of this process.

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