

Severe Eosinophilic Dermatitis & GI Disease

Severe eosinophilic dermatitis has been previously described in 9 dogs with bright-red papules and plaques. The cause was unknown, and all dogs had different suspected triggers, including arthropod bites, food allergies, drug reactions, and allergic skin disease. The one unique finding among all was diffuse eosinophilic dermatitis on histologic examination of skin biopsy specimens. In this retrospective study, the records of 29 dogs meeting the criteria for “eosinophilic dermatitis” were examined. All had severe eosinophilic dermatitis with or without furunculosis. Review of the medical records revealed 3 clinical groups. In the first group, 17 dogs were found to have been treated for vomiting and diarrhea 1 to 10 days before development of the lesions. Hypoalbuminemia was common in this group (10 dogs). None of the dogs available for follow-up had recurrence of the skin lesions. The second group, 5 dogs, had skin lesions and GI signs at time of examination; 4 were hypoalbuminemic. Skin lesions resolved and did not recur in group 2 dogs. The third group, 7 dogs, had no history of GI signs. In the first 2 groups, clinical signs consisted of severe erythema and/or hemorrhagic macules most commonly on the ventrum. Target lesions as well as facial swelling and edema were noted. Lesions were often pruritic but were described as painful in a few dogs. Skin lesions in the third group were more varied, and erythema and papules were noted on the ventrum, nasal planum, trunk, flank, and axilla. Five of seven dogs were reported to have painful lesions. Only 1 dog in group 3 had recurrence of skin lesions. Treatment for all 29 dogs varied but included supportive care; discontinuation of any suspect drugs; and various combinations of antihistamines, glucocorticoids, and other antiinflammatory drugs. The authors did not report any to be euthanized as a direct result of the skin lesions. When reviewing the drug history, the authors felt that drugs might be causally related to the development of the eosinophilic dermatitis in 6 dogs from group 1 and 1 each from the other 2 groups.

COMMENTARY: The major take-home point of this paper is to consider eosinophilic dermatitis in dogs that develop acute and persistent maculopapular eruptions, particularly on the ventral abdomen. The underlying cause is unknown, but there appears to be a strong association with gastrointestinal disease. In this group of dogs, 17 of 29 (58%) developed eosinophilic dermatitis after being treated for vomiting and/or diarrhea. Overall, 75% of dogs (22 of 29) had skin lesions and gastrointestinal signs. Definite diagnosis requires skin biopsy and key finding are eosinophilic dermatitis and flame follicles (follicles with an increased amount of trichilemmal keratin—this keratin looks brightly eosinophilic and resembles a flickering flame). Currently, the role of drugs is unknown because the authors could not prove a direct relationship.—*Karen A. Moriello, DVM, Diplomate ACVD*

Comparison of clinical history and dermatological findings in 29 dogs with severe eosinophilic dermatitis: A retrospective analysis. Mauldin EA, Palmeiro BS, Goldschmidt MH, Morris DO. *VET DERMATOL* 17:338-347, 2006.