**Lactobacillus-Caused Dermatitis**

A 5-year-old female macaw (Ara ararauna) presented for facial swelling and a nonhealing skin lesion on the cranioventral aspect of the keel. Lesions were noted by the owner 2 days and 2 weeks earlier, respectively. There were palpable subcutaneous masses over the pectoral muscles with suspected dermal invasion. Impression smears from the keel lesion revealed heterophilic infiltration. Dermatitis of fungal or bacterial origin was suspected. CBC revealed monocytosis and mild nonregenerative anemia.

Surgical debridement, coalescing subdermal granuloma removal, and tissue sampling for further diagnostic testing were performed. Ciprofloxacin therapy was started (10 mg/kg PO q12h). Histology revealed erythrocytes, heterophils, cellular debris, macrophages, and multinucleated giant cells with filamentous bacteria, short rods, and cocci. Skin specimens showed heterophilic dermatitis.

Light aerobic bacterial growth with a gram-positive rod was found. Standard chemistry panel suggested a type of Actinomyces spp, but gene sequence analysis identified the organism as Lactobacillus jensenii. Clindamycin (50 mg/kg PO q24h for 10 days) was added for treatment. Antibiotics were discontinued after 10 days, and full resolution was seen within 1 month of initial presentation. This was the first known reported case of Lactobacillus-associated dermatitis in human or veterinary literature.

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**Commentary**

This typically benign bacterium has previously been associated with septicemia and endocarditis in humans and animals. How often has Lactobacillus been identified on a culture but ignored as normal? One can only speculate how common it might be as a pathogen. This article reinforces that diagnostic assumptions should never be made simply because something does not fit our expected results.—Adolf K. Maas, DVM, DABVP (Reptile & Amphibian)

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**Source**


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**NUTRITION EXCHANGE:**

Keep GI tracts on track in boarded dogs

Veterinarians who board dogs are familiar with their tendency to develop diarrhea and gastrointestinal (GI) upset. What causes this? Boarded dogs can develop diarrhea for various reasons. The unfamiliar and often over-stimulated environment of a boarding kennel can cause the body to release stress hormones, which affect gut motility and can cause poor stool quality or a condition called stress-induced diarrhea. In addition, boarded dogs often are fed a different diet than they receive at home. Coupled with stress, an abrupt diet change can lead to an abnormal balance in GI microbiota. Stress-induced diarrhea tends to be large-bowel (colitis), characterized by straining to defecate and passing small volumes of stool more frequently. Diarrhea may contain blood and/or mucus.

What steps can veterinarians take to help keep GI microbiota in balance?

Research has shown that Enterococcus faecium SF68, the probiotic found in Purina Veterinary Diets® FortiFlora® Canine Nutritional Supplements, can help reduce the risk of stress diarrhea. This finding was supported in two studies: one conducted with Alaskan sled dogs using FortiFlora alone; the other with shelter dogs that had nonspecific diarrhea and were given both FortiFlora and metronidazole to manage diarrhea. In both studies, the group receiving SF68 had faster resolution compared to dogs that did not.

What types of diets are optimal for boarded dogs?

Keeping dogs on the same diet consumed at home will eliminate the risk of diarrhea associated with dietary changes. However, this may not be possible in every boarding situation. A highly digestible diet such as Purina Veterinary Diets® EN Gastroenteric® Canine Formula is a good option for feeding dogs while boarding. EN also contains the prebiotic aureleus (dry formula) or inulin ( canned formula). Prebiotics benefit dogs by selectively stimulating the growth or activity of beneficial colonic bacteria. For dogs with clinical signs of colitis, a moderate-fiber diet such as Purina Veterinary Diets® DCO Dual Fiber Control® Canine Formula can be beneficial.