

Patterns of Pruritus: A Diagnostic Tool

Pruritus can be a complicating factor or major feature of diseases, including flea infestations (FI), flea bite hypersensitivity (FBH), and canine atopic dermatitis (CAD); in many cases, pruritus may be the initial presenting clinical finding. Records from 346 dogs (91 CAD, 110 FI, 145 FBH) were analyzed to determine if unique characteristics of the pruritus pattern were helpful in diagnosis. Pruritus was a sensitive diagnostic finding for dogs with CAD (84%) and FBH (81%) but not flea infestations (61%). In addition to exhibiting behaviors more frequently associated with pruritus (eg, chewing, licking, rubbing), dogs with CAD and FBH were more intensely pruritic than dogs with FI. The most common locations of the pruritus varied among FI (ventral abdomen and/or medial thigh, radius and/or carpus and/or tarsus), FBH (back, dorsolumbosacral area, tail), and CAD (face and/or neck, lateral thorax and/or axillary areas, paws).

■ Commentary

Several flow charts are available for working up patients with pruritus but, in reality, diagnostic suggestions stem from history and signs. Flow charts are guides, not mandates. This information emphasized that there are patterns of pruritus in dogs with no apparent skin lesions (or evidence of fleas). From a practical perspective, scabies is worth mentioning; the severity of the pruritus from scabies far exceeds that of FI, FBH, or CAD; only combined yeast (severe) and bacterial infections and the rare case of advanced epitheliotropic lymphoma come close to this degree of pruritus.

Scabies is traditionally described as a disease with ventral distribution, but by the time it is seen, the lesions are usually generalized. Other differentiating factors include a purely papular eruption and a dog that is intensely pruritic to the point of



ignoring everything else. Using the study, it is relatively easy to prioritize the differential diagnoses of dogs with apparent pruritus as the sole presenting complaint.
—Karen A. Moriello, DVM, DACVD

■ ■ Source

Characterization of pruritus in canine atopic dermatitis, flea bite hypersensitivity and flea infestation and its role in diagnosis. Bruet V, Bourdeau PJ, Roussel A, et al. *VET DERMATOL* 23:487-E93, 2012.

FOCUS 3 Cases of Thromboembolism

Atrial fibrillation (AF) is the most common pathologic arrhythmia in dogs. Three dogs with AF and a complicating thromboembolism were described. A 13-year-old spayed, mixed-breed dog was referred for additional treatment of congestive heart failure (CHF) from degenerative valve disease and severe mitral regurgitation. Despite attempts to stabilize the patient, it died 12 hours after discharge.

A 5-year-old, neutered Bernese mountain dog was referred for lethargy, decreased appetite, and vomiting. Key findings for both included AF and an echo-dense spherical atrial mass consistent with a thrombus. Treatment with warfarin, aspirin, and other drugs was initiated. Echocardiogram 6 weeks postpresentation showed no evidence of the mass; sinus rhythm was restored with direct current cardioversion under anesthesia.

A 7-year-old male Shetland sheepdog was referred for treatment of CHF. During evaluation and treatment, the dog rapidly deteriorated and developed apparent severe left leg pain. The limb was cool with blanched skin. Color Doppler results suggested absence of blood flow in the left femoral artery. The dog was euthanized, and a large, firm, white thromboembolus was found in the aorta occluding the left external iliac artery.

■ Commentary

The multifactorial causes of thrombosis (Virchow's triad) affects the ability to predict dogs at increased risk for this complication. Diagnostic screening of the left atrial chamber at the onset of AF is feasible and noninvasive; echocardiography can be performed with newly diagnosed AF and should be encouraged if signs consistent with aortic thromboembolism develop.

Prophylactic anticoagulant intervention (not routine) should be implemented when a thrombus or consistent signs are observed. Although warfarin and aspirin were referenced in this article, there is no consensus on the best anticoagulant for these cases. Clopidogrel is an alternative to aspirin for inhibition of primary hemostasis. Warfarin, unfractionated heparin, and low molecular weight heparin block secondary hemostasis. Multiple factors, including clinician familiarity, cost, owner preference, and ability to monitor efficacy, may determine therapy.—Lydia Soydan, DVM

■ ■ Source

Thrombotic complications associated with atrial defibrillation in three dogs. Usechak PJ, Bright JM, Day TK. *J VET CARDIOL* 14:453-458, 2012.