

Pyrexia in Juvenile Dogs

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In the Literature

Black VL, Whitworth FJS, Adamantos S. Pyrexia in juvenile dogs: a review of 140 referred cases. *J Small Anim Pract.* 2019;60(2):116-120.

FROM THE PAGE ...

Identifying the cause of fever in dogs presents a diagnostic challenge. Therapies administered during the course of diagnostic investigation or prior to referral may further contribute to diagnostic difficulty. In this study, as well as in past reports,¹ ≥18% of patients did not have a definitive diagnosis. Vague and nonspecific presenting complaints and examination findings further compound the problem; for instance, patients with immune-mediated polyarthritis may have no apparent joint pain or effusion or may not exhibit obvious gait abnormalities despite clinical signs of systemic illness.^{2,3} Thus, it is important to understand not only the utility of diagnostic tests but also the likely diseases based on age, breed, history, examination findings, and geographic location. A minimum database for patients presented with fever should include a CBC, serum chemistry profile, diagnostic imaging, and infectious disease testing.

Although previous studies have evaluated pyrexia in patients of all ages,^{1,4,5} this study evaluated the diagnosis or presumed diagnosis in a cohort of pyretic juvenile dogs. Although a definitive diagnosis was not determined in 25 patients, noninfectious inflammatory diseases predominated (79%) in patients that did receive a diagnosis. Steroid-responsive meningitis arteritis was diagnosed in approximately 48% of those that received a diagnosis; patients with immune-mediated polyarthritis comprised another 11% of diagnoses. In previous studies,^{1,4} noninfectious inflammatory diseases were also common (24%-48%); however, specific causes identified were more varied than those found in the present study. Given the high number of noninfectious inflammatory diseases found in these studies, joint taps and CSF taps should be considered in patients with no cause of pyrexia found on initial testing or in those with persistent or waxing/waning fever. It is important to note that, although significant age overlap existed, infectious causes were more likely in younger patients in this study, although some infectious diseases (eg, bartonellosis) may be more difficult to identify. In contrast to dogs, a recent study found young cats to be more likely to have infectious causes of fever and, in general, immune-mediated disease to be less common in young and older cats.⁶

... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Ideally, a thorough diagnostic investigation should be performed in patients presented with fever to obtain a definitive diagnosis and direct appropriate treatment. This should include a minimum database and diagnostic imaging, although additional testing (eg, joint/CSF taps) may be needed.
- 2** Persistent fever in a juvenile patient, despite prior administration of antibiotics and nonsteroidal therapy, should prompt strong consideration for autoimmune disease, particularly steroid-responsive meningitis arteritis or polyarthritis.
- 3** Although infectious etiologies were not as common as noninfectious etiologies in this study, it is important to exclude infectious causes prior to testing or presumptive treatment for immune-mediated disease.

References

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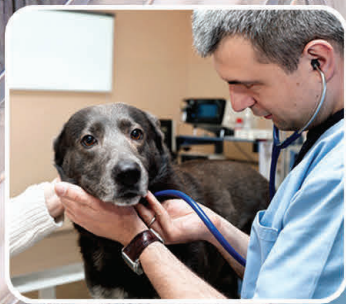
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