Research Note: Temporal Changes in Dogs with Preclinical Myxomatous Mitral Valve Disease

In this study, the authors describe the temporal changes in clinical and radiographic variables prior to development of congestive heart failure (CHF) in dogs with stage B2 myxomatous mitral valve disease. Dogs developing CHF showed increased heart rates, respiratory rates at home and in the clinic, and vertebral heart sums. Rectal temperatures and body weights were decreased. Vertebral heart sums gradually increased over 12 months, whereas the other variables changed in the 2 to 10 months prior to developing CHF. The variables with the highest absolute change and rate of change were observed with respiratory rates at home and in the clinic, suggesting monitoring of these variables may enable earlier detection and management of CHF.

Source

Boswood A, Gordon SG, Häggström J, et al. Temporal changes in clinical and radiographic variables in dogs with preclinical myxomatous mitral valve disease: the EPIC study. J Vet Intern Med. 2020;34(3):1108-1118.

Research Note: Novel Serologic Markers & Autoantibodies in Dogs with Inflammatory Bowel Disease

The prevalence of inflammatory bowel disease (IBD) in dogs warrants an easier route for diagnosis, as the current path is costly, invasive, and time-consuming. In this study, researchers explored the possibility of using serologic markers for diagnosis of IBD in dogs, similar to what is done in human medicine. Serologic markers represent the patient's reaction to translocation of GI pathogens in the bloodstream when the gut mucosal barrier breaks down. Three cohorts were studied: dogs diagnosed with IBD via biopsy, dogs with acute GI signs from causes other than IBD, and a normal cohort. ELISA methods were developed to detect autoantibodies against canine polymorphonuclear leukocytes (ie, antipolymorphonuclear leukocytes antibody [APMNA]) and calprotectin, microbial outer membrane porin C (OmpC), antibodies against foodderived gliadins, and flagellins isolated from diseased dogs. Of these, antibodies against APMNA and *Escherichia coli* OmpC exhibited the highest single-marker performance for discriminating IBD from other acute GI conditions and normal cohorts.

Source

Estruch JJ, Barken D, Bennett N, et al. Evaluation of novel serological markers and autoantibodies in dogs with inflammatory bowel disease. *J Vet Intern Med*. 2020;34(3):1177-1186.

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1. Data on file at Boehringer Ingelheim.

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