Bile, Bacteria, & Bactibilia

In dogs, bacterial cholecystitis and bactibilia are important differentials for patients presenting with signs of biliary tract disease. This report examined 10 bacterial cholecystitis or bactibilia cases and compared them to 30 control dogs with hepatobiliary disease without bactobilia or cholecystitis. Data examined included signalment, history, clinicopathologic data, ultrasound findings, cultures, surgical observations, histopathology, treatment, and outcomes.

Although no examination or clinicopathologic variable was specific to bacterial cholecystitis or bactibilia, immobile biliary sludge, identified in 7 case dogs but no control dogs, was 70% sensitive and 100% specific for bactibilia diagnosis. Ultrasound-guided cholecystocentesis to collect samples for cytology and bacteriologic culture was performed in all 40 dogs. This procedure had no associated complications and assisted in confirming diagnosis and guiding appropriate antimicrobial therapy. Four case dogs were managed medically with ursodeoxycholic acid and extended antimicrobial treatment periods. Serum chemistry panel and bile culture were repeated monthly. Clinical signs and clinicopathologic changes improved in 2 of 4 treated dogs before resolution of bactibilia, which took 4 to 9 months. All medically managed dogs had good outcomes. Surgical cholecystectomy also provided good outcomes. Inflammatory bowel disease was present histologically in 3/4 case dogs for which intestinal biopsies were obtained; unlike in cats, no previous association between cholangitis and IBD in dogs has been noted.

Commentary

In this study, enteric bacteria were the predominant type isolated (*Escherichia coli* as most common), with 2 anaerobic isolates identified. The high incidence of antimicrobial drug resistance found with previous antimicrobial treatment, especially in *Enterococcus* spp isolates, is concerning. The combination of biliary ultrasonography and ultrasound-guided bile sample collection may adequately screen for bactibilia in dogs with hepatobiliary disease, particularly if immobile biliary sludge is identified. In addition, repeated bacteriologic bile culture to monitor response to medical management can be important in these patients, particularly because resolution of clinical signs and improvement of clinicopathologic variables were noted before bactibilia resolution. In cases managed surgically, the immediate postoperative mortality rate was similar to previous reports (22%-40%).—*Ana Costa, DVM, MS, DACVIM*

Source

Lawrence YA, Ruaux CG, Nemanic S, Milovancev M. Characterization, treatment, and outcome of bacterial cholecystitis and bactibilia in dogs. *JAVMA*. 2015;246(9):982-989.

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