

GALLBLADDER MUCOCOELE IN DOGS: TWO CASE REPORTS

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A gallbladder mucocoele is an abnormally distended gallbladder containing highly viscous bile. It is now considered as one of the more common causes of extra hepatic biliary obstruction, cholecystitis and fatal bile peritonitis. Gallbladder mucocoele in the dog was first reported in 1965. An apparent increase in gallbladder mucocoele detection occurred after 2000, probably attributable to better diagnostic techniques. This study describes two cases of gallbladder mucocoele in dogs presented to the Veterinary Teaching Hospital, University of Peradeniya in 2012.

Both cases were 6-year-old female German Shepherd dogs. The first case was presented with complaints of reduced appetite and intermittent vomiting of one week duration. Clinical examination revealed icteric mucosae, mild hepatomegaly and poor body condition. The haemogram was normal except for mild leucocytosis ($28.6 \times 10^3/\mu\text{l}$). Laboratory findings included marked hypoalbuminaemia (1.7 g/dl), mildly elevated alanine transaminase (ALT; 253 IU/L) and aspartate aminotransferase (AST; 206 IU/L), hyperbilirubinaemia (9.47 mg/dl) and an elevated icteric index (50). Moderate hepatomegaly, splenomegaly and a markedly thickened and distended gallbladder with thick biliary sludge were identified with ultrasonography. The condition was diagnosed as cholecystitis and cholestasis and was treated with amoxicillin (20 mg/kg iv q12h), ursodiol (15 mg/kg po q24h) and supportive treatment. The animal died 20 days after presentation and a necropsy confirmed the ultrasonography findings. Comparison of the gallbladder histopathology with that of a normal animal, revealed thickening of the submucosa and muscularis externa with accumulation of bile in the lumen.

The second case presented with similar complaints with the additional sign of chronic ascitis. Clinical examination revealed pale mucous membranes, dyspnoea and cachexia. Laboratory findings were mild leucocytosis ($28.6 \times 10^3/\mu\text{l}$), severe anaemia (13.6%), elevated blood urea nitrogen (177.5 mg/dl), increased ALT (381 IU/L) and hypoalbuminaemia (1.76 g/dl). Ultrasonography showed a gallbladder mucocoele with classic “kiwi fruit” appearance. Treatment was similar to the previous case and surgery was not attempted due to the high anaesthetic risk. Necropsy and histopathological findings were similar to the previous case.

Medical management is recommended for subclinical cases of mucocoele while cholecystectomy is indicated for clinical cases. Prognosis is good with early surgical intervention and poor with ruptured or severely infected gallbladders. To the best of our knowledge, these are the first cases of gallbladder mucocoele in dogs reported in Sri Lanka. Early diagnosis of gallbladder mucocoele with surgical or medical intervention is necessary for successful management of this condition.