## **Poster presentations**

## Clinical presentation in a Portuguese population of dogs with myxomatous mitral valve disease

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Myxomatous Mitral Valve Disease (MMVD) is the most commonly diagnosed acquired heart disease in dogs. This disease is characterized by a long subclinical course, which progresses variably to clinical disease. Previous studies have reported that the presence of a cardiac murmur is the most common clinical presentation in these dogs, and that the most frequent clinical signs include cough, exercise intolerance and dyspnea.

The aims of this study were to retrospectively evaluate the clinical presentation of MMVD in a heterogeneous Portuguese population of dogs presented to HVP during a 13-year period. Additionally, the presence of concomitant airway disease was investigated in dogs in stage B1 and B2 that presented with cough.

Clinical data regarding heart rate (HR), murmur intensity (0-6), systolic blood pressure (SBP), the presence or

absence of airway disease and of clinical signs as cough, exercise intolerance, anorexia, syncope, ascites and dyspnea, were collected from a total of 477 medical records. All dogs included in the study underwent a complete physical and echocardiographic examination. In dogs in stage B1 or B2 that presented with cough, cough was confirmed to be due to concomitant airway disease by radiographic and echocardiographic examination in conjunction with information regarding follow-up and response to therapy.

From the 477 medical records, 235 had complete information regarding clinical signs. In these 235 records, 139 symptomatic dogs were identified. At baseline examination, 90 (64.7%) dogs presented with cough, 48 (34.5%) with exercise intolerance, 36 (25.9%) with dyspnea, 36 (25.9%) with syncope, 25 (18%) with anorexia and 8 (5.8%) with ascites. Out of the 90 dogs that had cough, 44 (48.9%) were in stage B1 or B2, which means that in these cough was caused by concomitant airway disease. Of the 177 dogs with information regarding cardiac auscultation and murmur intensity, 156 (88.1%) had a left apical systolic murmur. Murmur grades were mainly between 2 and 5 (95.6%). The mean SBP was 149.5  $\pm$  26.51 mmHg (n= 63), and the mean HR was 135  $\pm$  37.9 bpm (n= 477).

The findings of this study regarding clinical signs reported are in agreement with the results from previous studies. The concomitant presence of airway disease seems to represent the higher risk factor for coughing in dogs with MMVD. Therefore, this should be taken into account when considering diagnosis and clinical management of these dogs.

## Two cases of canine gallbladder carcinoid: clinical and ultrasonographic findings Gabriele Barella<sup>1</sup>, Matteo Lodi<sup>1</sup>, Paola Scarpa<sup>2</sup>, Stefano Faverzani<sup>1</sup>

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Gallbladder carcinoid is a rare neoplasia that arise from the dispersed cells of the neuroendocrine system of the biliary three. This tumour have been described in humans and dogs.

In the few reports we can find in literature, canine patients affected by this neoplasia present a combination of symptoms such as: vomiting, weight loss, lethargy, fever, melena, anaemia, hematemesis and jaundice.

Haemobilia, hemocholecyst and common bile duct dilation have been found in few dogs presenting gallbladder carcinoid. Clinical-ultrasonographic findings and long term follow up of two asymptomatic dogs affected by gallbladder carcinoid are described.

Dog 1: Mixed breed, 10 years old, 28 kg, underwent ultrasonographic examination for a routine follow up control because previously affected by low grade splenic lymphoma. Liver was sonographically normal and a 4 cm, round shaped, inhomogeneous mass was found into the gallbladder arising from its wall. This mass presented a massive Doppler vascular signal. Bile was hypoechoic and inhomogeneous with a small amount of biliary sludge. Common bile duct (CBD) diameter was normal (< 3 mm). Visceral lymphadenopathy was not reported

Dog 2: English Bulldog, 9 years old, 30 kg, underwent ultrasonographic examination because of a routine control of urate cystolithiasis. Liver was sonographically normal and a 1,5 cm, round shaped, inhomogeneous mass with regular margins was found into the gallbladder. This mass presented a massive Doppler vascular signal. Fluid content of gallbladder was anechoic. CBD diameter was normal (< 3 mm). Visceral lymphadenopathy was not reported.

Dogs underwent laparotomic cholecystectomy and hepatic biopsy. Any abdominal lesion was found during surgery, the patency of CBD was verified with a retrograde catheterization and no blood or clots were found into the gallbladder or biliary three.

Histology and immunohistochemistry confirmed the diagnosis of gallbladder carcinoid. Hepatic biopsy did not reveal any alteration except from a mild portal hepatitis.

Dogs recovered well and they remained asymptomatic; they were sonographically evaluated 3 and 12 months after surgery and no abnormalities attributable to metastasis were found. However both dogs presented a CBD dilation (almost 1 cm) without any sign of post-hepatic jaundice.

CBD dilation have been described in humans with an history of cholecystectomy and it seems to be related to senior age.