



VETCT
CONSULTANTS IN TELEMEDICINE

IT'S YOUR CASE

Species: Canine

Breed: Cavalier King Charles Spaniel Sex: Male Neutered Age: 8.5 years

Clinical History:

A heart murmur was first detected 2 years ago. Today, he presents with a moist cough that has worsened over the last few weeks.

Details of study and technical comments: A radiographic study of the thorax is presented for evaluation. The study consists of right and left lateral views as well as 2 ventrodorsal views.

There is mild rotation of both ventrodorsal views.

Diagnostic interpretation:

THORAX: The cardiac silhouette is enlarged: Left atrial dilation as indicated by straightening of the caudal cardiac waist on the lateral view, divergence of the caudal mainstem bronchi and a summation on the VD view (aka bow legged cowboy, blue arrows). Left ventricular enlargement is indicated by dorsal displacement of the trachea (maroon arrow). Suspected right heart enlargement is evidenced by rounding of the right caudal cardiac silhouette on the ventrodorsal view. On the right lateral view, increased opacity of pulmonary parenchyma is in the left caudal lung lobe. On the ventrodorsal view, the vessels of this lung lobe are well-defined and the opacity is not noted. There is a diffuse bronchial pattern symmetrically distributed in the lungs (orange arrows). There are multiple mineral opaque foci that are less than 2 mm in diameter and are superimposed over the periphery of the lungs.

The pulmonary vasculature is normal in diameter and tapers as it extends to the periphery. The trachea and mainstem bronchi are normal. The pleural space and mediastinum are unremarkable.

The thoracic vertebral column is unremarkable without evidence of fracture, luxation or osteolysis. The cranial abdomen has good serosal contrast. There are regions of mineral superimposed over the central and right divisions of the liver.

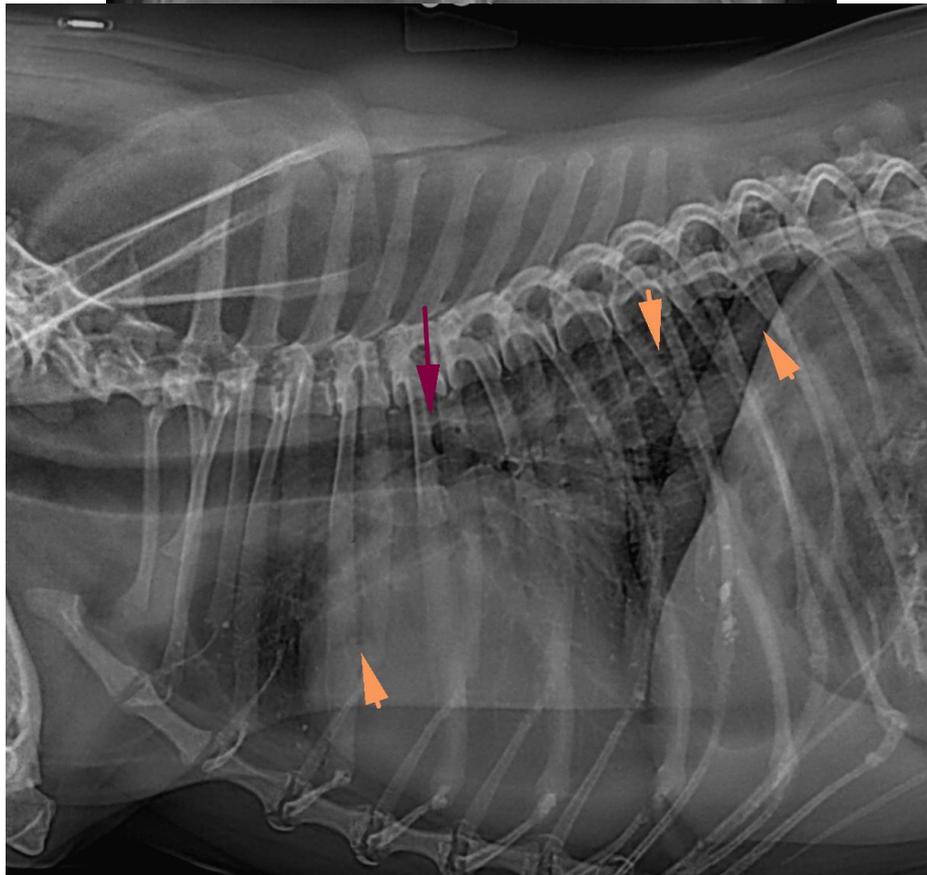
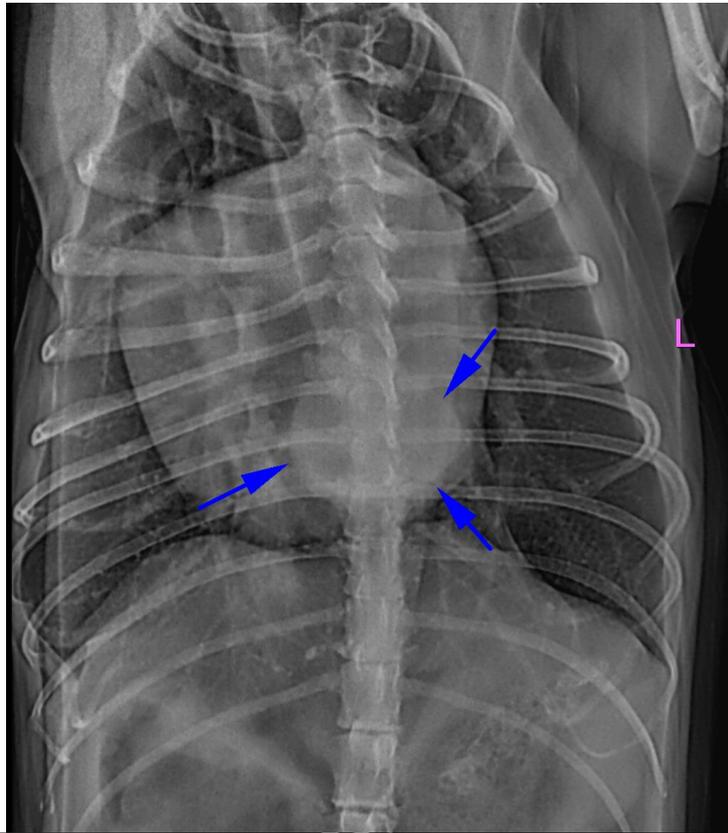


Reported by VetCT

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This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It has been prepared specifically for interpretation by the currently licensed and registered veterinary surgeon responsible for the care of this patient.



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Conclusions:

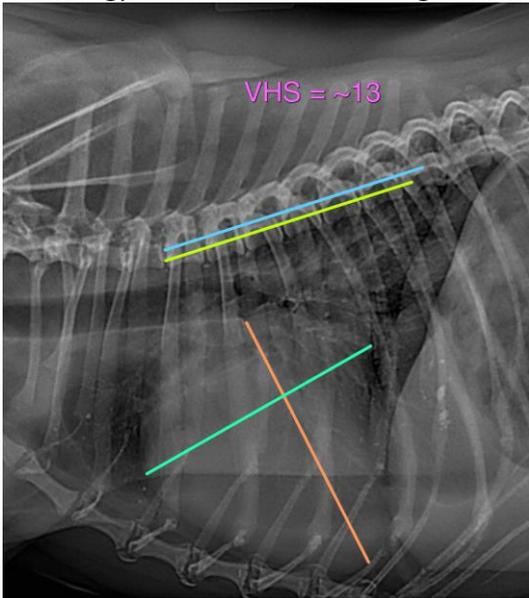
- Left sided cardiomegaly is consistent with mitral valve insufficiency. The primary aetiology is likely mitral valve degeneration/endocardiosis.
 - No evidence of left sided heart failure.
- Right atrial dilation reflects tricuspid valve insufficiency (tricuspid valve degeneration) versus pulmonary hypertension.
- The bronchial and interstitial changes may be indicative chronic lower airway inflammation (i.e bronchitis +/- fibrosis). Infectious aetiologies are considered unlikely.
- Probable biliary mineralization, of unknown significance.
- Pulmonary osteomas, which are incidental.

Additional comments:

Left atrial enlargement can manifest as alteration in height or width or both. When there is increased height of this chamber, a “double density” or “bow legged cowboy” sign is observed on the ventrodorsal view as a round opacity superimposed over the caudal cardiac margin. There is no evidence enlarged vessels or pulmonary oedema. The subtle increase in opacity on the right lateral view likely represents transient atelectasis given the expiratory nature of this image capture.

One may also use the vertebral heart score as an objective measurement of cardiomegaly. The vertebral heart score in this patient is enlarged and measures 12.75. Vertebral heart score is most effective when used as a serial assessment of cardiomegaly to track changes over time.

Cardiology consultation is encouraged for echocardiogram and electrocardiogram.



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