



PATIENT

Boo Mobley

SPECIES

Canine

BREED

Dachshund

SEX

Male Neutered

AGE

4.20.08

WEIGHT

21.8lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Animal Emergency
Hospital

REFERRING VET

Dr. Saubier

INVOICE

28734

DATE

2.2.23

PRESENTING CLINICAL SIGNS

History: Anorexia, lethargy, stomach distended- concern for "bloating". History of getting large amount of table foods, treats. Grandfathers dog; passed away in December; P is a very picky eater and worried for grieving. O has been trying to entyce P to eat with Ham, turkey hot dog etc. History: Chronic cough + Left main stem bronchus collapse - chronic bronchitis, Cardiomegaly, Hypercalcemia, Sees internal medicine + Oncology. Current medications: Theophylline + hydrocodone (dosage is not what is on bottle)- Hydrocodone is Q12. Visit on 12/7/22: Bloodwork: Calcium 12; HCT 57.9%, UA: WBC 6-10; Urine culture performed. Abdominal ultrasound: Outcome; Hepatic changes are mild and may be due to aging, fibrosis, steroid hepatopathy, hepatitis, diffuse neoplasia. Sludge in the gallbladder is likely an incidental finding. Bilateral renal changes would be most consistent with chronic kidney disease/aging. No changes were seen in the lower urinary tract to account for the patient's clinical signs. Initial exam: QAR, lenticular sclerosis, possibly starting with cataracts, Lungs clear, no murmur, tense abdomen
-Current medications: Theophylline and Hydrocodone.
-STAT: Requested by DVM
-Imaging performed by: Andi Parkinson, RDMS.

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental information only.

Normal cardiac silhouette. No obvious evidence of CHF.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Trace mitral regurgitation with no left atrial dilation. Decreased LV diameter with adequate myocardial function. LV walls appear increased, most consistent with pseudohypertrophy. The tricuspid valve appears normal with no tricuspid regurgitation. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Mildly elevated pulmonic and aortic outflow velocities with laminar flow. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

CARDIAC CHART

| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO (Boon method) | LA/AO (Heart Base; Swe) | FS (%) | EF (%) | EPSS (cm) |
|---|-------------------------|-------------------------|-------------------------------|-----------------------------------|--|---|---|
| NORMAL PARAMETER | 4.5-5.5 | <2.7 | 1.3 | <1.6 | 28-40 | 40-100 | <0.6 |
| PATIENT | NM | NA | NM | 1.1 | 43 | 77 | NM |
| CANINE CARDIAC PARAMETERS | HR (BPM) | AV VMAX (m/s) | PV MAX (m/s) | BODY WEIGHT (kg) | LA 2D short axis Base view (cm) | LVIDd Avg; 2D and m-mode short axis (cm) | LVIDs Avg; 2D and m-mode short axis (cm) |
| NORMAL PARAMETER | 50-100 | 0.7-1.7 | 0.7-1.6 | BELOW | BELOW | BELOW | BELOW |
| PATIENT | 215 | 1.7 | 2.2 | 9.9 | 1.5 | 1.8 | 1.1 |
| *Normal chamber parameters expressed as a mean value (SD) | | | | 3 | 1.27 (5.3) | 2.46 (2.46) | 1.36 (5.5) |
| BODY WEIGHT DEPENDENT PARAMETERS | | | | 5 | 1.40 (4.5) | 2.74 (5.2) | 1.60 (4.7) |
| <i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i> | | | | 10 | 1.50 (3.8) | 3.27 (3.5) | 2.06 (3.1) |
| | | | | 15 | 1.83 (2.0) | 3.71 (2.4) | 2.43 (2.1) |
| | | | | 20 | 2.02 (1.9) | 4.14 (2.2) | 2.80 (2.0) |
| | | | | 25 | 2.18 (2.4) | 4.48 (2.9) | 3.10 (2.5) |
| | | | | 30 | 2.33 (3.3) | 4.83 (3.9) | 3.39 (3.4) |
| | | | | 35 | 2.48 (4.3) | 5.17 (5.0) | 3.69 (4.5) |
| | | | | 40 | 2.62 (5.2) | 5.48 (6.1) | 3.96 (5.4) |
| | | | | 50 | 2.88 (7.1) | 6.07 (8.3) | 4.46 (7.4) |

Adapted from June Boon, Veterinary Echocardiography, 1998
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435
Hansson et al, Vet Rad and Ultrasound 2002
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overtly normal cardiac structure and function are documented in this study. There is evidence of pseudohypertrophy (typically caused by dehydration/hypovolemia) as seen by increased LV wall thickness, small LVIDd dimension and increased flow velocity through both great vessels. Immediate reassessment of volume status is recommended. No additional issues are identified.

Given these findings, certainly CHF is not an issue in this case and Lasix should be discontinued. On the contrary, this patient needs immediate volume resuscitation depending on clinical status. Hypotension further supports this theory and may improve with fluid therapy. The cough and respiratory signs are noncardiac in origin and further continued treatment/assessment of lower airway disease is recommended.

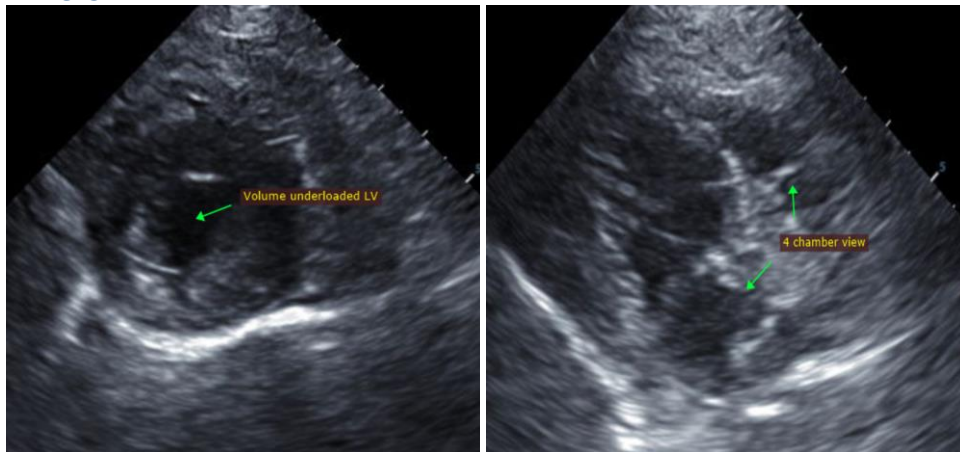
No medications are indicated. No cardiac contribution to the current clinical issues is suspected.

Pending lab results, no structural cardiac contraindication for general anesthesia.

Monitor for signs of cardiac compromise, including development of a cough, labored breathing or syncopal episodes.

A recheck echocardiogram is recommended should a murmur or signs of cardiac disease be noted in the future.

IMAGES



The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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