

PATIENT

Callie Sirju

SPECIES

Canine

BREED

Dachshund

SEX

Female Spayed

AGE

2006

WEIGHT

25.2lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Belvedere Veterinary
Center

REFERRING VET

Dr. Amstalden

INVOICE

20647

DATE

8/19/21

PRESENTING CLINICAL SIGNS

History: Acute onset of labored breathing/tachypnea. Possible tender on palpation of abd.
Ate rat poison one week ago and vomiting was induced shortly after ingestion.
-at time of induced vomiting, she fell over/syncopal episode. Owner put her on a diet 2 weeks ago and she has lost just over 1 lb. History: -chronic UTI's -Obesity. New findings: 5/6 holosystolic murmur.
-Pertinent abnormal PE/Chem/CBC/UA Results: Chem: inc bun 29 (27), inc phos: 7.5 (6),
inc Na: 155 (156), inc alp: 412 (131). CBC: inc wbc 15.8 (15.5), Inc neutrophils: 11534 (10600),
inc monocytes: 1106 (840). UA: (free catch). dec USG: 1.009, inc blood: 2+, inc WBC: 4-10,
inc rods: 51-100, inc struvites: 4-10. T4: wnl, accuplex: neg.
-Current medications: Lasix 12.5mg PO BID, Amoxicillin (urine cul/mic pending), Dasuquin.
-Sedation used: Not needed.
-STAT: Not requested.

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental information only.
Cardiomegaly. No evidence of overt CHF.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets (anterior>posterior) with mild prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with moderate left atrial dilation. Elevated MR velocity. Mildly increased LV diameter with hyperdynamic myocardial function. The tricuspid valve appears subjectively normal, with trace tricuspid regurgitation. Normal velocity. Normal right atrial and ventricular diameter. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities. No aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

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 | 6.3 | 2.5 | NM | 1.8 | 45 | 78 | 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 | 137 | 1.6 | 0.98 | 11.4 | 3.3 | 3.9 | 1.9 |
| *Normal chamber parameters expressed as a mean value | | | | 3 | 1.27 (5.3) | 2.46 (2.46) | 1.36 (5.5) |
| BODY WEIGHT DEPENDENT PARAMETERS | | | | | | | |
| *Note: All measurements based upon multi-modal images and methods. An average value is reported. | | | | | | | |
| 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 | | | | 5 | 1.40 (4.5) | 2.74 (5.2) | 1.60 (4.7) |
| | | | | 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) | | | | |

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing moderate mitral and trace tricuspid regurgitation. Moderate left atrial enlargement indicates there is relatively low risk for imminent complication, however risk for progression to spontaneous congestive heart failure in the future is elevated. No additional issues are identified.

Given the risk for progression and results of the EPIC trial, Pimobendan is indicated in this patient as below. Assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).

Given moderate structural disease, CHF is considered unlikely and there is no obvious indication for continued Lasix therapy. That being said, if the patient dramatically responded to the medication consider a Radiologist review of the films. In light of the history and moderate disease however, a primary respiratory issue should be considered more likely.

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

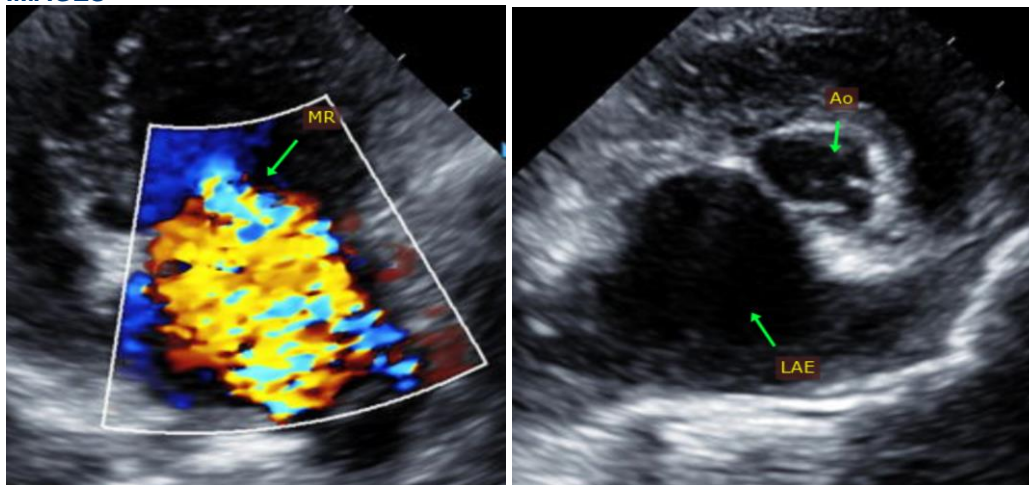
Once on the medication for 3-5 days, anesthetic risk is considered mildly elevated. Cardiac protective drug choices (opioid/benzodiazepine premedication, Propofol or alfaxalone induction, iso or sevo gas) are recommended. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Judicious IV fluid rates are recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

PLAN

Baseline BP is recommended. Discontinue Lasix unless the response has been dramatic. Institute heart muscle support Pimobendan 0.3mg/kg PO q12h. Consider hydrocodone as discussed.

Recommend monitor for progression with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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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Diplomate of the American College of Veterinary Internal Medicine (Cardiology)**