

PATIENT

Zoey Westerhof

SPECIES

Canine

BREED

LH Dachshund

SEX

Female Spayed

AGE

13.4 years

WEIGHT

19.4lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Val Shumskaya

HOSPITAL NAME

Westwood Regional
Veterinary Hospital

REFERRING VET

Dr. Hartwick

INVOICE

32315

DATE

8/11/23

PRESENTING CLINICAL SIGNS

History: Recheck echo. Syncope resolved once medications were initiated. Recent cough for the last week.

-Radiographs: Left-sided cardiomegaly, diffused broncho interstitial pattern.

-Current medications: Benazepril 5mg x 3/4 PO q12hrs, Pimobendan 2.5mg q12hr, Spironolactone 25mg 1/2 q12hrs, given Lasix injection on 8/10/23, Lasix 2mg/kg POQ12hrs.

-Pertinent previous echo findings (6/2022 MML): Severe MR, severe LAE, mild LVE, mild RHE, mild TR, moderate AI. LA: 2.8, LV: 4.0.

ECHOCARDIOGRAM FINDINGS

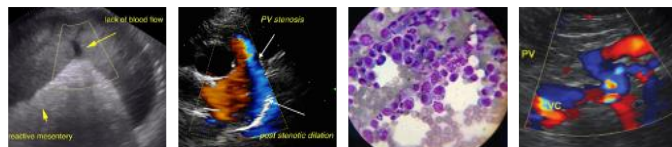
2D, m-mode, color flow and doppler imaging is available. The mitral valve is diffusely thickened with mild prolapse into the left atrial lumen. There is severe eccentric mitral regurgitation present. The MR velocity is normal. There is severe left atrial enlargement. There is mild left ventricular dilation. Left ventricular systolic function is hyperdynamic. Mild right atrial and ventricular dilation (subjective). Mild thickening of the tricuspid valve with mild to moderate TR. Normal velocity. There is normal systolic flow velocity across the aortic valve. The aortic valve appears trileaflet with normal mobility. Moderate aortic insufficiency. The main pulmonary artery is normal in diameter. The pulmonic valve is normal in appearance. No pericardial/pleural effusion or cardiac masses are seen.

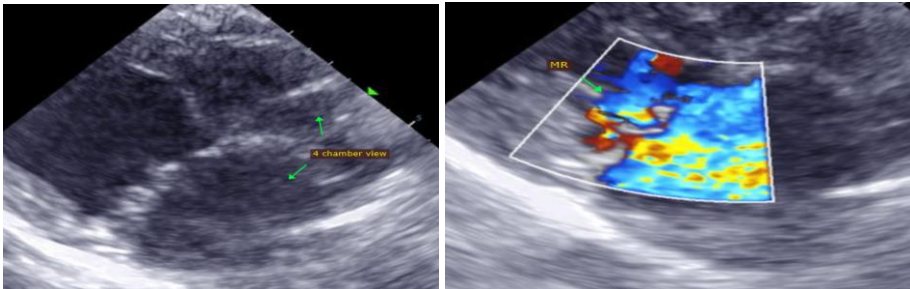
CARDIAC CHART

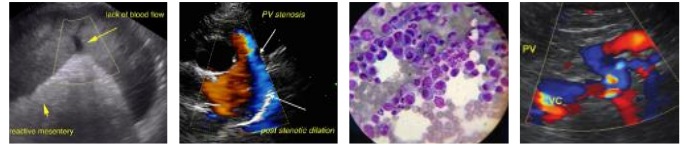
| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO (Boon method) | LA/AO (Heart Base; Swe) | FS (%) | EF (%) | EPSS (cm) |
|--|---------------|---------------|---------------------|-------------------------|---------------------------------|--|--|
| NORMAL PARAMETER | 4.5-5.5 | <2.7 | 1.3 | <1.6 | 28-40 | 40-100 | <0.6 |
| PATIENT | 5.3 | 2.0 | NM | 2.1 | 63 | 92 | 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 | 130 | 1.9 | 0.9 | 4.3 | 3.1 | 3.9 | 1.5 |
| *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) |
| *Note: All measurements based upon multi-modal images and methods. An average value is reported. | | | | 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

Compared to the prior study, findings are similar. Severe mitral and mild to moderate tricuspid/aortic regurgitation persists. The left dimensions, while significantly enlarged, have not



| | |
|--|---|
| PATIENT | progressed significantly. No pulmonary hypertension or other issues have developed. Routine blood pressure monitoring is advised due to the presence of AI. |
| Zoey Westerhof | |
| SPECIES | Given these findings, continue cardiac medications as previously recommended. If CHF was diagnosed on the radiographs and the patient responded to therapy, Lasix should also be continued. |
| Canine | |
| BREED | The cough may be mechanical in origin; however, recurrent CHF must always be considered. Repeat CXR are recommended. Consider hydrocodone if needed for QOL. |
| LH Dachshund | |
| SEX | Once CHF is diagnosed, the prognosis is poor long-term (stage C) with a mean survival rate of <1 year. Unfortunately, the patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future. |
| Female Spayed | |
| AGE | Close monitoring for development of associated clinical signs (development of a cough, labored breathing, exercise intolerance or worsening collapse episodes) is recommended. Monitoring of sleeping breathing rates is recommended as the best way to screen for CHF at home. |
| 13.4 years | |
| WEIGHT | Elective anesthesia is not advised , as there is high risk for complication. If necessary, cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, iso or sevoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction and recover in O2 cage. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Moderate IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated. |
| 19.4lbs | |
| INTERPRETED BY | Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. |
| Maggie Machen Lamy, DVM, DACVIM (Cardiology) | |
| IMAGING PERFORMED BY | PLAN |
| Val Shumskaya | A screening BP is recommended every 6 months. CXR recommended. Continue Pimobendan, Benazepril and Spironolactone as previously recommended. If CHF was confirmed, continue Lasix 1-2mg/kg PO q12h. |
| HOSPITAL NAME | Monitor renal values every 3-4 months lifelong to ensure tolerance of medications. |
| Westwood Regional Veterinary Hospital | A recheck echocardiogram is recommended in 6 months to screen for progression, sooner if clinical signs arise. |
| REFERRING VET | IMAGES |
| Dr. Hartwick |  |
| INVOICE | |
| 32315 | |
| DATE | |
| 8/11/23 | |



PATIENT

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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.

SPECIES

Canine

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.

BREED

LH Dachshund

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com

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