



PATIENT

Maggie Laidlaw

SPECIES

Canine

BREED

Springer Spaniel

SEX

Female Spayed

AGE

14 years

WEIGHT

16.4kgs

PRESENTING CLINICAL SIGNS

History: Chronic history of idiopathic hypertension (on amlodipine 2.5 mg BID), hypothyroidism (on thyroxine 0.3 mg BID), urinary incontinence (on phenylpropanolamine and stilbestrol), diabetes insipidus (on desmopressin), non-functional right adrenal mass (negative for urinary catecholamines and excess cortisol secretion). Also on meloxicam and gabapentin for chronic OA and disc disease. Presented with frequent skipped beats on health exam, had also been having periods of weakness on walks. ECG revealed frequent VPCs and runs of ventricular tachycardia. Started on Sotalol and improved walks and heart rhythm. BP: today 157/91 (105, HR = 112, 160.89 (103), HR = 112, 160/90 (105), HR = 97. Chest rads normal except prominent aortic arch on lateral. No arrhythmia noted today. Sedated with butorphanol and trazadone.

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. No mitral regurgitation with a normal left atrial dimension. Normal LV diameter with adequate myocardial function. 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. Normal pulmonic and mildly elevated aortic outflow velocities with laminar flow. Trace/mild AI. Mildly thickened aortic valve. No obvious pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses. A normal sinus rhythm was noted during the study (single lead ECG attached).

CARDIAC CHART

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Nigel Gumley, DVM

HOSPITAL NAME

Cedarview Animal
Hospital

REFERRING VET

Dr. Gumley

INVOICE

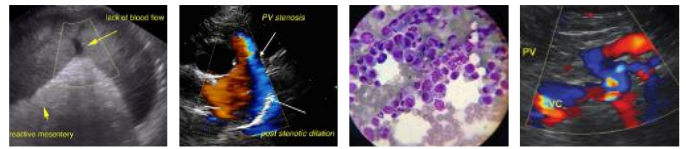
28389

DATE

1/17/22

| 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 | NA | NA | NM | 1.1 | 31 | 60 | 0.34 |
| 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 | 142 | 2.6 | 0.8 | 16.4 | 2.4 | 3.2 | 2.2 |
| *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) |

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



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Essentially normal cardiac structure and function. The only abnormality identified is mildly increased flow velocity through the aortic valve with mild valve thickening and a small insufficiency. This may be secondary to valve damage from previous systemic hypertension; however, the finding is largely insignificant. This may cause a soft basilar murmur depending on heart rate/volume status. No significant valvular insufficiencies were noted and no structural issues identified.

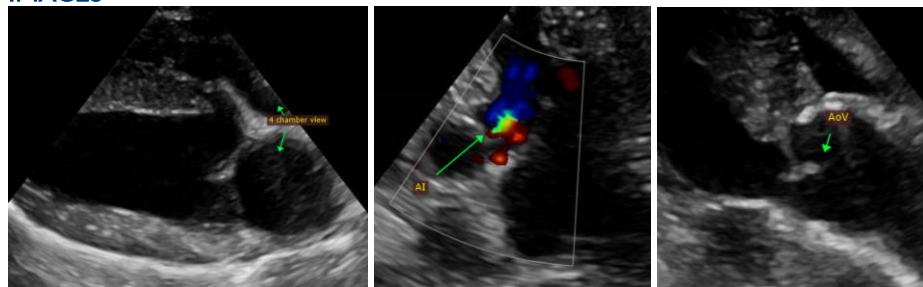
No structural cause for ventricular arrhythmias is seen here. This would suggest the arrhythmia is a primary conduction issue, or potentially secondary to systemic illness/neoplasia. Consider full systemic evaluation if not performed.

No cardiac medications are indicated. No cardiac contraindication for general anesthesia.

Monitor for any development of cough, labored breathing or exercise intolerance.

Recommend recheck echocardiogram in 12 months to screen for progressive changes.

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.

Maggie Machen Lamy, DVM
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