



PATIENT

Jasmine Sanders

PRESENTING CLINICAL SIGNS

History: Presented for dental prophylaxis. Pre-op ECG and interpretation: tall R/P waves. CXR: VHS 10.5, right heart enlargement. No murmur or arrhythmia on PE, asymptomatic at home.

-Pertinent abnormal PE/Chem/CBC/UA Results: Chem 10- WNL.

-Sedation used: Not needed.

-STAT: Not requested.

SPECIES

Canine

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 no left atrial dilation. Normal LV diameter with adequate myocardial function. The tricuspid valve appears mildly thickened with mild to moderate tricuspid regurgitation. Velocity consistent with mild pulmonary hypertension. 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 aortic outflow velocities with laminar flow. Trace/mild aortic insufficiency. No pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

BREED

Pomeranian

SEX

Female SPayed

CARDIAC CHART

AGE

12 years

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	3.4	NM	1.2	52	86	NM

WEIGHT

8.5lbs

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	170	1.1	1.1	3.9	1.4	1.8	0.9

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

*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				
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				
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)	

HOSPITAL NAME

Hickory Veterinary Hospital

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

REFERRING VET

Dr. Lyle

INVOICE

21674

DATE

10/22/21

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

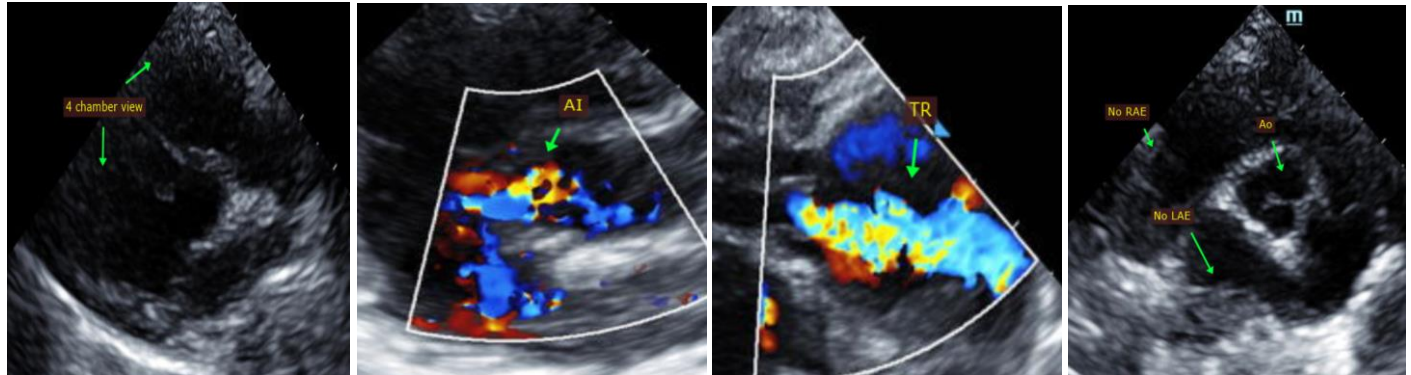
Chronic degenerative valve disease causing mild to moderate tricuspid regurgitation. Lack of significant right atrial enlargement indicates the current risk for complication is low. Mild pulmonary hypertension is noted which may be the genesis of this purely right-sided leak. This is of unknown significance in an asymptomatic dog. Additionally, there is a small aortic insufficiency, and a baseline blood pressure is recommended. No mitral regurgitation or other issues are identified, and the right heart remains normal in dimension.

Given these findings, no cardiac medications are clearly indicated. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1). Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. **Pre-oxygenate for 5-10 minutes prior to induction.** Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

Recommend conservative monitoring 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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