



PATIENT

Woody Frye

SPECIES

Canine

BREED

Terrier Mix

SEX

Male Neutered

AGE

11 years

WEIGHT

17lbs

INTERPRETED BY

Maggie Machen
 Lamy, DVM, DACVIM
 (Cardiology)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

South Willamette
 Veterinary Clinic

REFERRING VET

Dr. Willaman

INVOICE

23148

DATE

3/16/22

PRESENTING CLINICAL SIGNS

History: Possible seizure activity on 3/3/22 lasting approx 3 min.
 -Abnormal lab results: Glob sl elevated at 4.7.
 -Current medications: Vetmedin 1.25mg BID & Furosemide 20mg BID started on 3/10/22
 -Radiographic Findings: Show right sided cardiac enlargement, mild pulmonary edema.

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 50mm/s, 10mm/mV. The average heart rate is 120bpm (range 103-133bpm). The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. No ectopic beats, pauses or dysrhythmias observed. ECG diagnosis: Normal sinus rhythm with respiratory variation.

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. Normal MR velocity. Borderline LV dilation with adequate myocardial function. The tricuspid valve appears mildly thickened with trace tricuspid regurgitation. Borderline 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	5.8	2.8	NM	1.75	38	70	0.2
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	120	1.7	0.7	7.7	2.3	3.2	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)
				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
Adapted from June Boon, Veterinary Echocardiography, 1998				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
Hansson et al, Vet Rad and Ultrasound 2002				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				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)



PATIENT

Woody Frye

	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)

SPECIES

Canine

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. The ECG is unremarkable with a respiratory sinus arrhythmia.

BREED

Terrier Mix

The nature of the episode make syncope unlikely, as it reportedly lasted for 3 minutes. Most syncope is seconds in length with a rapid onset and recovery period. Highly recommend further neurologic evaluation based upon this description. Even if syncope were more likely, no obvious cause is seen in this study, such as severe pulmonary hypertension.

SEX

Male Neutered

Given these findings, reasonable to continue Pimobendan going forward. No indication for Lasix therapy. CHF is considered highly unlikely, particularly in the absence of respiratory signs. If there is any question on the diagnosis, a Radiologist review of the films is recommended. Right heart enlargement is also identified which is not seen here and would make pulmonary edema unlikely. Assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).

AGE

11 years

WEIGHT

17lbs

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.

INTERPRETED BY

Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

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.

IMAGING PERFORMED BY

Sara Hansen

PLAN

Baseline BP recommended. Continue Pimobendan as prescribed. Discontinue Lasix unless CHF is highly suspected. Further neurologic evaluation is recommended

HOSPITAL NAME

South Willamette
Veterinary Clinic

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

REFERRING VET

Dr. Willaman

IMAGES

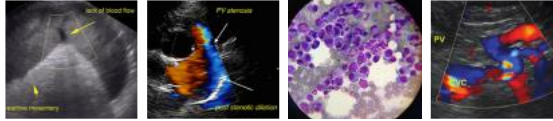


INVOICE

23148

DATE

3/16/22



PATIENT

Woody Frye

SPECIES

Canine

BREED

Terrier Mix

SEX

Male Neutered

AGE

11 years

WEIGHT

17lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

South Willamette
Veterinary Clinic

REFERRING VET

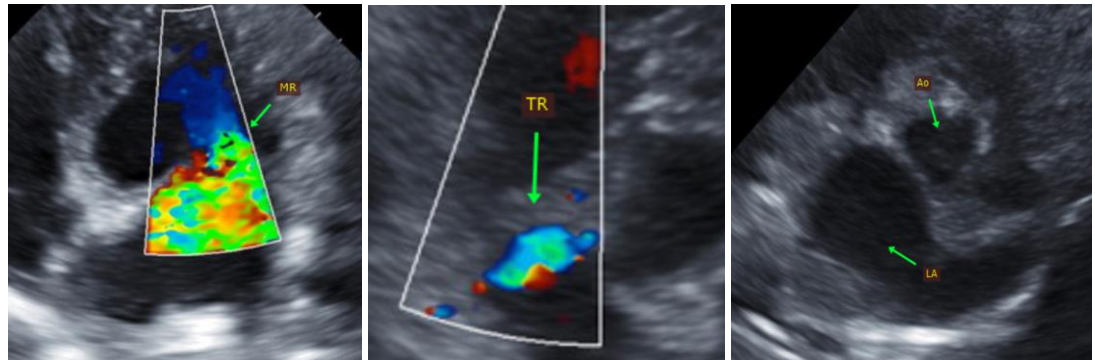
Dr. Willaman

INVOICE

23148

DATE

3/16/22



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
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com