

**PATIENT**

Arlo Vicianova

**SPECIES**

Canine

**BREED**

Doberman Pinscher

**SEX**

Male Intact

**AGE**

5 years

**WEIGHT**

115.8lbs

**INTERPRETED BY**Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)**IMAGING PERFORMED BY**

Kim Liedberg

**HOSPITAL NAME**

SVS Imaging WI

**REFERRING VET**

Dr. Presier

**INVOICE**

25228

**DATE**

7/8/22

**PRESENTING CLINICAL SIGNS**

History: Grade 3/6 heart murmur. Clinically normal but pants a lot. On grain-free diet.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Mild thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Mild eccentric mitral regurgitation with mild left atrial dilation. Normal MR velocity. Mild LV dilation in both systole and diastole with mild systolic dysfunction. The LV appears spherical. The tricuspid valve appears normal with trace tricuspid regurgitation. Normal velocity. 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. No obvious aortic insufficiency or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

**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	6.0	2.2	1.3	1.4	24	40	1.1	
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	1.3	52.5	1.8	5.9	4.5	
*Normal chamber parameters expressed as a mean value (SD)					3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>					5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>					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 mild mitral and trace tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. The LV is dilated with systolic dysfunction, which may be secondary to valve disease, may be secondary to grain-free diet, or may reflect early primary cardiomyopathy. No additional issues are identified.

Given these findings, no cardiac medications are clearly indicated. A diet change is certainly recommended in this breed regardless (see WSAVA guidelines). A taurine supplement can be considered, although it is likely unnecessary if the diet is changed. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1). Omega

**PATIENT**

Arlo Vicianova

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.

**SPECIES**

Canine

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.

**BREED**

Doberman Pinscher

**PLAN**

Diet change recommended. Consider taurine supplementation 1000mg PO q12h.

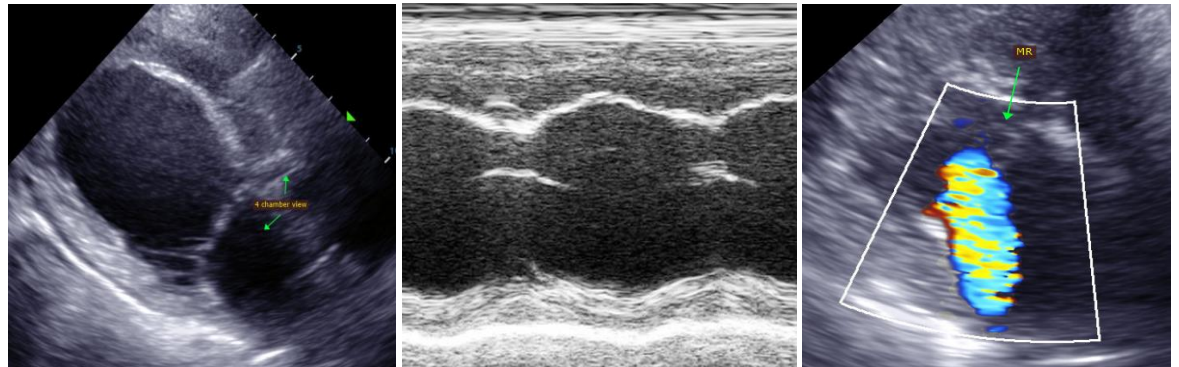
**SEX**

Male Intact

Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

**AGE**

5 years

**IMAGES****WEIGHT**

115.8lbs

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DVM, DACVIM  
(Cardiology)

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.

**IMAGING PERFORMED BY**

Kim Liedberg

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

**HOSPITAL NAME**

SVS Imaging WI

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