



PATIENT

Lexie Hilgendorf

SPECIES

Canine

BREED

Shih Tzu

SEX

Female Spayed

PRESENTING CLINICAL SIGNS

History: Recheck echo. Grade 4/6 left side systolic heart murmur and history of seizures. Elevated ProBNP: 4386.
-Pertinent previous echo findings (10/2021 MML): Mild MR, mild LAE. LA: 1.8, LV: 2.5.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with mild prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with moderate left atrial dilation. Normal MR velocity. Mild LV dilation with hyperdynamic 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 aortic outflow velocities with laminar flow. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

CARDIAC CHART

AGE

9 years

WEIGHT

10lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Kim Liedberg

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

Dr. Bloss

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DATE

2/1/23

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	5.5	NA	1.3	1.8	54	87	0.14
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	140	1.0	0.7	4.5	2.1	2.9	1.2
*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)
<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 persists with evidence of progression. Previously mild MR has advanced to moderate, with increasing left heart dimensions. 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.

Based upon these findings, recommend institution of Pimobendan as below. Additionally, a baseline BP is recommended. Continued assessment of progression is recommended, with a

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guarded prognosis going forward (stage B2). Patient may be at risk for development of CHF, arrhythmias, and/or sudden death going forward.

SPECIES

Canine

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.

BREED

Shih Tzu

Once on the medication for 3-5 days, anesthetic risk remains 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.

SEX

Female Spayed

PLAN

Baseline BP recommended every 6 months. Institute Pimobendan 0.25-0.3mg/kg PO q12h.

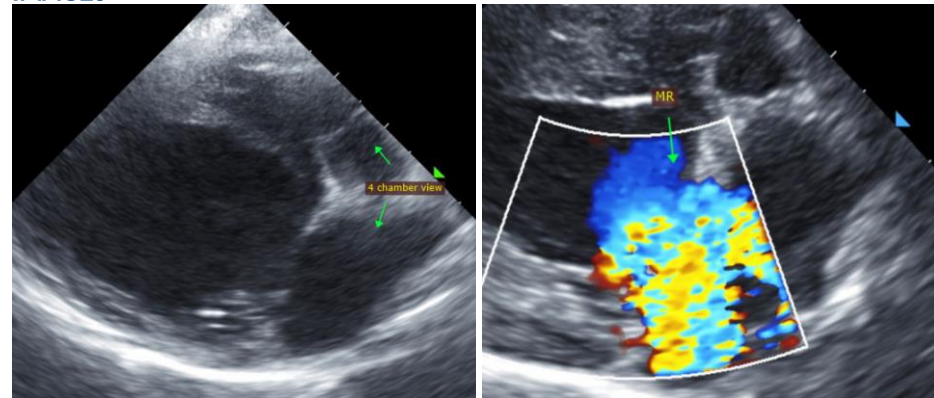
Recommend monitor for progression with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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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.

HOSPITAL NAME

SVS Imaging WI

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.

REFERRING VET

Dr. Bloss

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