



PATIENT

Zoey Hansen

SPECIES

Canine

BREED

Shih Tzu

SEX

Female Spayed

AGE

13 years

WEIGHT

14lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Garro

INVOICE

21305

DATE

9/30/21

PRESENTING CLINICAL SIGNS

History: Recheck echo. Grade 5/6 heart murmur.

-Current medications: Pimobendan 2.5mg BID, Furosemide 12.5mg BID, Sildenafil 10mg BID.

-Blood pressure: 170, 170, 150mmHg.

-Pertinent previous echo findings (3/2021 MML): Premature beats, mild MR, mild LAE, normal LV, mild RHE, suspect moderate pulmonary hypertension. Recommend Sildenafil, Pimobendan and discontinue Lasix.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Marked diffuse thickening of mitral valve leaflets with significant prolapse into the left atrial lumen. Mild mitral regurgitation with mild left atrial dilation. Normal MR velocity. Normal LV diameter with adequate myocardial function. The tricuspid valve appears severely thickened and prolapsing with mild tricuspid regurgitation. Velocity consistent with at least moderate pulmonary hypertension. Mild right atrial enlargement. Moderate right ventricular enlargement with hypertrophy. Mild MPA and branch dilation. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. No obvious aortic and trace 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	4.8	3.5	1.5	1.4	64	94	0.26
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	66	0.85	0.94	6.4	1.9	2.2	0.8
*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/PAH persists without evidence of significant progression. The left heart disease remains mild and stable with similar findings. The LV is decreased in dimension comparatively and may reflect volume depletion. Finally, the right heart appearance and pulmonary pressures appear similar to previous with potentially a slight improvement. No updated clinical status is provided. It is assumed that the patient is doing well at home and Pimobendan and Sildenafil should be continued going forward. As was mentioned in the prior

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report, Lasix can actually lead to worsening clinical signs in these cases and should be discontinued. Respiratory signs are unlikely to reflect CHF given what is seen here and primary respiratory disease should be addressed as a separate problem. Theophylline, cough suppressants, etc. can be utilized as needed to maintain quality of life.

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Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a labored breathing, exercise intolerance or collapse episodes.

BREED

Shih Tzu

PLAN

Continue sildenafil and Pimobendan as prescribed. No obvious indication for Lasix as previously discussed. Continue respiratory treatment as dictated by the clinical picture. Baseline lab work with fluid therapy if needed.

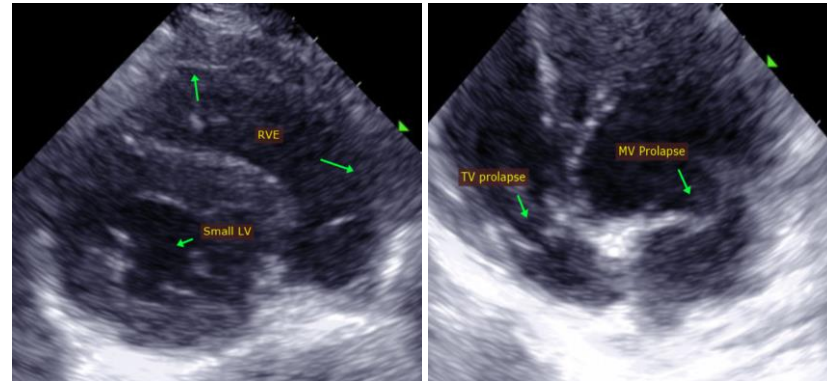
SEX

Female Spayed

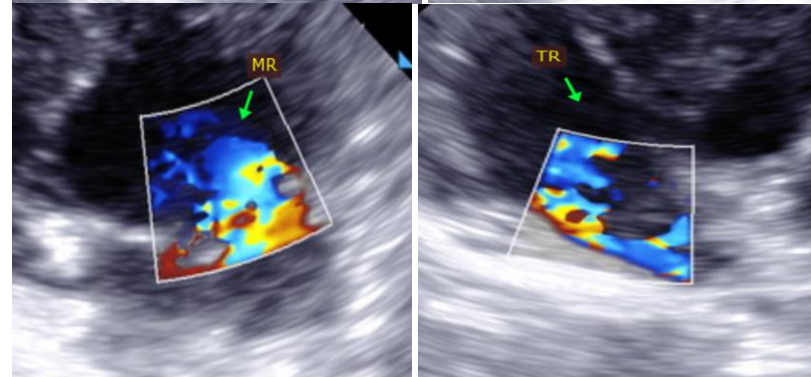
A recheck echocardiogram is recommended in 6 months to screen for progression, sooner if clinical signs arise.

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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.

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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.

DATE

9/30/21

Maggie Machen Lamy, DVM
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