



PATIENT

Sparkle Yuknis

SPECIES

Canine

BREED

Shih Tzu

SEX

Female Spayed

AGE

3.31.03

WEIGHT

9.7lbs

PRESENTING CLINICAL SIGNS

History: Recheck echo. Long standing grade 5/6 murmur. No clinical signs.

-Current meds: Enalapril 3.75mg PO q24h, Pimobendan 1.25mg PO q12h, Hycodan 12.5mg PO q12h

-Sedation used: Torbugesic IV.

-Pertinent previous ultrasound results (6/2021 MML): Moderate MR, moderate LAE, no LVE, mild TR, mild PAH: 3.4m/s. LA: 1.9, LV: 2.6.

-STAT: Not requested

-Imaging performed by: Stephanie Pearce RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The mitral valve is diffusely thickened (anterior>>posterior leaflet) with marked prolapse into the left atrial lumen. There is moderate eccentric mitral regurgitation present. The MR velocity is normal. There is moderate left atrial enlargement with a horizontal component. There is no left ventricular dilation. Left ventricular systolic function is hyperdynamic. There is normal systolic flow velocity across the aortic valve. The aortic valve appears trileaflet, mildly thickened and with normal mobility. The main pulmonary artery is normal in diameter. The pulmonic valve is normal in appearance. Normal right atrium. Normal right ventricle. Mild thickening of the tricuspid valve with mild tricuspid regurgitation. Velocity consistent with mild pulmonary hypertension. No overt evidence of pulmonary hypertension. No pericardial/pleural effusion or cardiac masses are seen.

CARDIAC CHART

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME

North Laurel Animal Hospital

REFERRING VET

Dr. Steere

INVOICE

23676

DATE

4.14.22

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	3.3	NM	1.5	46	80	NM
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	104	0.9	1.5	4.4	1.9	2.4	1.3
*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)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				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)

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Persistently stable disease without evidence of progression. Moderate MR and moderate left heart enlargement is similar to the previous study. Mild pulmonary hypertension is unchanged with mild TR. No additional issues are noted in this study.

Given these findings, continue Pimobendan and Enalapril going forward. No indication for additional medications.

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

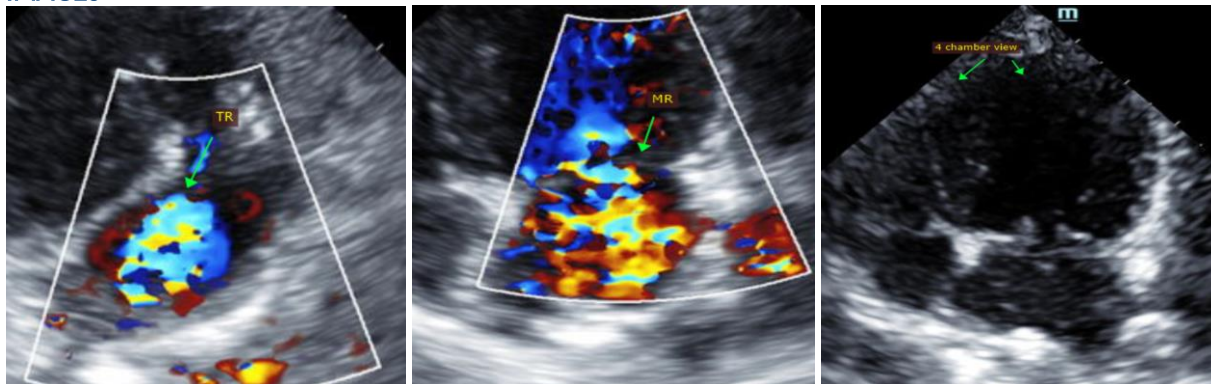
Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively 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

PLAN

Screening BP is recommended every 6 months. Continue Pimobendan as prescribed and ACE-I as prescribed.

A recheck echocardiogram is recommended in 6-12 months to continue to screen for progression, sooner if clinical signs arise.

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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