



PATIENT

Tyson Bae

SPECIES

Canine

BREED

Shih Tzu

SEX

Male Neutered

AGE

13 years

WEIGHT

18.8lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Animal General on
Hudson

REFERRING VET

Dr. Lang

INVOICE

24418

DATE

5/25/22

PRESENTING CLINICAL SIGNS

History: Grade 1/6 systolic murmur auscultated during annual exam. Owner reports no signs of pancreatitis but PSL high on blood work. 1 pound of unintentional weight loss.
-Abnormal PE/Chem/CBC/UA Results: PSL 643.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Mild eccentric mitral regurgitation no mild left atrial dilation. Normal LV diameter with adequate myocardial function. The tricuspid valve appears mildly thickened with mild 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 and mild 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	NM	2.2	1.0	1.2	38	70	0.3
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	1.4	0.75	8.5	1.6	2.2	1.4
*Normal chamber parameters expressed as a mean value (SD)							
BODY WEIGHT DEPENDENT PARAMETERS							
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>							
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							
3 1.27 (5.3) 2.46 (2.46) 1.36 (5.5)							
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)							
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 tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. No concurrent issues such as systolic dysfunction or pulmonary hypertension are noted in this study.

In a dog with no significant left atrial enlargement, no cardiac medications are clearly indicated. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1). Omega fatty acid supplementation and mild salt restriction may be of



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some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

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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

Shih Tzu

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

SEX

Male Neutered

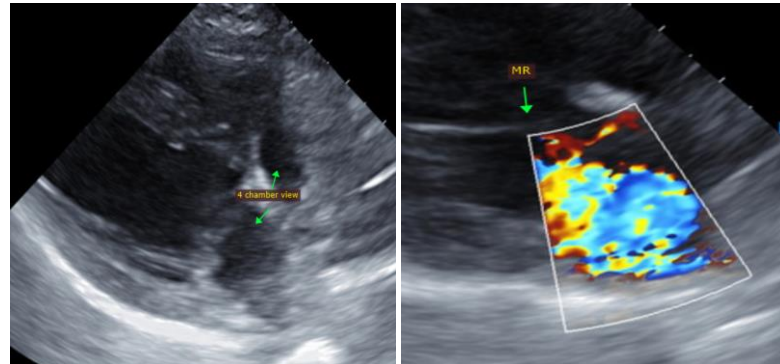
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IMAGES



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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.

IMAGING PERFORMED BY

Kelly Vazquez, CVT

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.

HOSPITAL NAME

Animal General on
Hudson

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