



**PATIENT**

Sake Klein

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Male Neutered

**AGE**

13 years

**WEIGHT**

15.5lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. History chronic valvular disease. Current presentation: Sake has been coughing more recently often with exertion. Some labored breathing when coughing or with exertion but not at rest. He is eating well with normal activity. On exam today: NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear. BP: 200 mmHg x 3. Current medications: 1) Pimobendan 7.5mg 1/3 tab twice a day 2) Enalapril 2.5mg 1/4 tab twice a day 3) Spironolactone 12.5mg 1/2 tab twice a day 4) Lasix 20mg 3/4 tab twice a day 5) Phenobarbital 16.2mg/ml 0.7mls twice a day -Pertinent previous echo findings (4/29/20 Maggie Machen Lamy, DVM, DACVIM-Cardiology): LA 2.0 cm; LA:Ao 1.4; LV 2.35 cm; mild-moderate LAE; moderate MR; mild TR (3.5 m/s; 48 mmHg); mild pHTN. \*No sedation for study

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and Doppler imaging is available.

**Left ventricle:** The LV diameter is normal with adequate myocardial function. LV wall thicknesses are normal.

**Left atrium:** The left atrium is mild to moderately dilated.

**Mitral valve:** The mitral valve is diffusely thickened with mild prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with a normal velocity.

**Aortic valve/Aorta:** The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.

**Right ventricle:** Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.

**Right atrium:** Normal RA dimension.

**Tricuspid valve:** The tricuspid valve appears mildly thickened with mild to moderate tricuspid regurgitation; mildly elevated velocity.

**Pulmonary valve/Pulmonary artery:** The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.

**Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses.

**Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 130bpm.

**IMAGING**

**PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary  
Services

**REFERRING VET**

Dr. Masloski

**INVOICE**

24144

**DATE**

5/11/22

**2-Dimensional Measurements**

Ao diam (cm)	1.6
LA diam (cm)	2.3
LA:Ao (Swe)	1.4
IVS thickness (cm)	0.7
LVID diastole (cm)	2.3
PW thickness (cm)	0.7
LVID systole (cm)	0.7
FS (%)	69

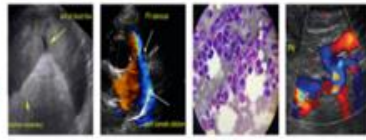
**Doppler Measurements**

PV Vmax (m/s)	1.0
AoV Vmax (m/s)	1.2
MR Vmax (m/s)	5.3
TR Vmax (m/s)	3.3
TR PG (mmHg)	45

**INTERPRETATION OF THE FINDINGS**

Chronic degenerative valve disease persists with mitral and tricuspid regurgitation persists. The left heart is unchanged, with what appears to be a volume corrected LV (previous concern for pseudohypertrophy). The LA and MR are stable. The degree of TR is slightly increased, with increasing pulmonary pressures. No additional issues are identified.

These findings support a respiratory cause of the increased cough. Repeat CXR may be useful, with hydrocodone etc as needed to control the cough. This is likely related to progressive (yet still mild) TR/PAH, and further evaluation is recommended.



**PATIENT** Prognosis remains guarded long-term.

Sake Klein

**RECOMMENDATIONS**

- Continue medications as prescribed.
- CXR, hydrocodone, etc.
- Monitor renal values and BP every 3-4 months lifelong.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Elective anesthesia is not advised.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes. Monitoring of sleeping breathing rates is the best way to assess for recurrent CHF in the future.

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**PLAN**

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

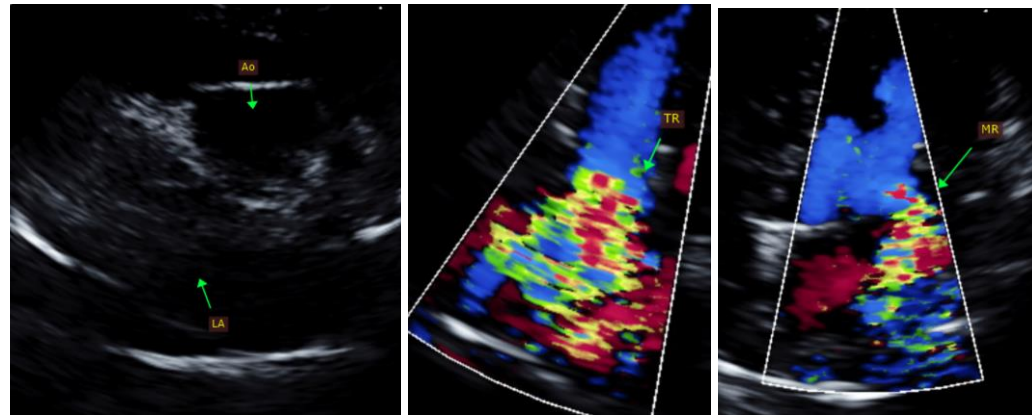
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Maggie Machen Lamy, DVM DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Pamela Harrigan, RDCS

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**

Mass Veterinary Services

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.

**REFERRING VET**

Dr. Masloski

Maggie Machen Lamy, DVM  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com

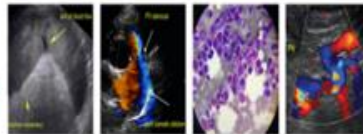
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**Echocardiogram performed by:** Pamela Harrigan, RDCS  
Pet Animal Ultrasound Service (4paus.com)

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