



**PATIENT**

Leo Sundberg

**SPECIES**

Canine

**BREED**

Samoyed

**SEX**

Male Neutered

**AGE**

2 years

**WEIGHT**

55.4lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Norfolk County  
Veterinary Service

**REFERRING VET**

Dr. Poor

**INVOICE**

25879

**DATE**

8/18/22

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. History sub-aortic stenosis with borderline moderate disease. Currently, frequent panting, weak femoral pulses, mm color is pink. On Atenolol 25 mg, 1/2 BID.

-Pertinent previous echo findings (8/5/21 Maggie Machen Lamy, DVM, DACVIM-Cardiology) LA 2.6 cm; LA: Ao 1.2; LV 3.5 cm; IVS 0.85 cm; PW 0.93 cm; LVOT Vmax: 3.5 m/s. \*Sedated with Alfaxalone (heavy panting throughout 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 minimally increased.

**Left atrium:** The left atrium is normal.

**Mitral valve:** The mitral valve is mildly thickened with no prolapse into the left atrial lumen. No mitral regurgitation.

**Aortic valve/Aorta:** The aortic valve appears trileaflet with normal mobility. Elevated aortic outflow velocity (max PG 50mmHg). A sub-aortic narrowing can be seen at the level of the LVOT. Mild 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 normal with no tricuspid regurgitation.

**Pulmonic 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 80bpm.

**2-Dimensional Measurements**

Ao diam (cm)	1.8
LA diam (cm)	2.5
LA:Ao (Swe)	1.3
IVS thickness (cm)	0.84
LVID diastole (cm)	3.6
PW thickness (cm)	0.90
LVID systole (cm)	2.5
FS (%)	31

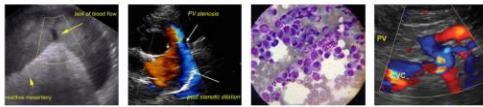
**Doppler Measurements**

PV Vmax (m/s)	1.1
AoV Vmax (m/s)	3.5
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

**INTERPRETATION OF THE FINDINGS**

Unchanged structural disease is identified in this study. Borderline mild to moderate subaortic stenosis (SAS) persists with a small aortic leak. No evidence of chronic pressure overload at this time and no changes are appreciated.

These findings would suggest a noncardiac cause for excessive panting is suspected. One exception would be if the heart rate is too slow, as there is a decline compared to the prior study (likely due to sedation). Consider reassess a heart rate check independent of sedation to ensure the dose is appropriate. Target stressed heart rate is 120-130bpm without lethargy noted at home. Weak pulses are not abnormal with an aortic outflow obstruction and are unlikely to cause concern.



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Given these findings, no additional medications are warranted. Prognosis remains guarded long term.

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**RECOMMENDATIONS**

- Continue Atenolol as prescribed with careful consideration of heart rate control.
- Monitor for development of labored breathing, exercise intolerance or collapse episodes, as SAS patients are more predisposed to development of arrhythmias than to CHF.
- Mild exercise restriction is advised lifelong.
- Omega fatty acid supplementation (1000mg 1-2x daily) may be of some long-term benefit for dogs predisposed to arrhythmias.
- If needed, anesthetic risk is mildly elevated. Avoid heart rate stimulating drugs such as atropine or glycopyrrolate unless clinically indicated. Avoid ketamine and acepromazine due to peripheral vascular effects. Mild IV fluid restriction is advised. Recommend prophylactic antibiotics prior to and during any orthopedic or dental procedure in the future given predisposition to endocarditis.

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**PLAN**

- Recommend recheck echocardiogram in 1 year to screen for progression, sooner if any clinical signs arise.

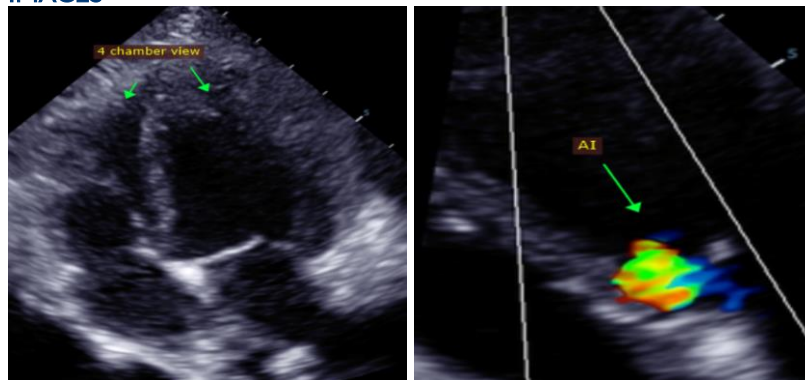
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**REFERRING VET**

Dr. Poor

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.

**INVOICE**

25879

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

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