



**PATIENT**

Gia Persad

**SPECIES**

Canine

**BREED**

Pomeranian Mix

**SEX**

Female Spayed

**AGE**

11 years

**WEIGHT**

17.5lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary Services

**REFERRING VET**

Dr. Masloski

**INVOICE**

28990

**DATE**

2/14/23

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. History chronic valvular disease - Stage B1. Presently, Gia had 8-9 collapsing episodes in November, 2022, which occurred when excited. Gia was started back on Pimobendan (had been discontinued) and has only had one episode since that time. She has an occasional cough; no exercise intolerance. She is eating well. On exam: NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear, mm pink, moist, CRT<2. BP: 140mmHg. Current medications: Pimobendan/vetmedin 2.5mg 1 tab twice a day--restarted 11/29 \*No sedation for study.

-Pertinent previous echo findings (12/8/21 Scott Forney, DVM, DACVIM-Cardiology): LA 2.1 cm; LA:Ao 1.4; LV 2.7 cm; mild LAE; moderate MR; trivial TR (insufficient volume to estimate RVSP).

**ELECTROCARDIOGRAPHIC FINDINGS** \*Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 25mm/s, 10mm/mV, 2-minute duration. The average heart rate is 140bpm (range 120-166bpm). The rhythm is sinus in origin, with a p for every QRS complex and vice versa. P and QRS morphologies are positive. Two isolated APCs are appreciated; singles only. No ventricular premature beats, pauses or other dysrhythmias observed.

ECG diagnosis: Normal sinus rhythm with rare, isolated APCs.

**ECHOCARDIOGRAM FINDINGS**

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

**Left ventricle:** The LV diameter is increased with hyperdynamic myocardial function. Evidence of significant volume overload. LV wall thicknesses are normal.

**Left atrium:** The left atrium is severely dilated.

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

**Aortic valve/Aorta:** The aortic valve appears normal. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.

**Right ventricle:** The right ventricle is moderately dilated with significant hypertrophy. Septal flattening in systole.

**Right atrium:** Moderate RA dilation.

**Tricuspid valve:** The tricuspid valve appears mildly thickened with septal prolapse and moderate tricuspid regurgitation; velocity consistent with severe pulmonary arterial hypertension.

**Pulmonic valve/Pulmonary artery:** The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow. The MPA and branches are mildly dilated.

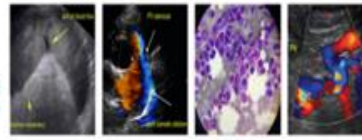
**Pericardium/other:** No pericardial effusion noted. No pleural effusion. No obvious cardiac masses.

**2-Dimensional Measurements**

Ao diam (cm)	1.3
LA diam (cm)	2.9
LA:Ao (Swe)	2.2
IVS thickness (cm)	0.8
LVID diastole (cm)	3.2
PW thickness (cm)	0.7
LVID systole (cm)	0.8
FS (%)	75

**Doppler Measurements**

PV Vmax (m/s)	0.6
AoV Vmax (m/s)	1.6
MR Vmax (m/s)	5.5
TR Vmax (m/s)	5.5
TR PG (mmHg)	120



**PATIENT**

Gia Persad

**SPECIES**

Canine

**BREED**

Pomeranian Mix

**SEX**

Female Spayed

**AGE**

11 years

**WEIGHT**

17.5lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING  
PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary  
Services

**REFERRING VET**

Dr. Masloski

**INVOICE**

28990

**DATE**

2/14/23

**INTERPRETATION OF THE FINDINGS**

Chronic degenerative valve disease causing severe mitral and moderate tricuspid regurgitation. Significant 4 chamber dilation indicates the risk for congestive heart failure is elevated. Additionally, there is severe pulmonary hypertension present with septal flattening and right heart enlargement, which further puts the patient at risk for right-sided congestion, and/or syncope. Compared to the prior report, there is certainly evidence of progression.

Given the history and severity of disease seen here, life-long cardiac medications are recommended as below. Sildenafil is recommended in this case as well given the severity of the pulmonary hypertension and reported syncopal episodes. Additionally, Spironolactone should be utilized for long-term benefit.

The ECG is largely normal with two isolated APCs. These are not surprising given the severity of disease seen here in a stressful situation. What is seen here does not warrant therapy as the risk for associated clinical signs is low.

The prognosis is poor long term, with a predicted survival time of 6-12 months. Patient will always be at high risk for recurrent biventricular CHF, LA tear, progressive cough and/or malignant arrhythmias/sudden death in the future.

**RECOMMENDATIONS**

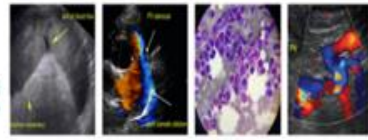
- Continue Pimobendan 0.3mg/kg PO q12h.
- Institute ACE-I 0.5mg/kg PO q12h.
- Institute Spironolactone 1-2mg/kg PO q12h.
- Institute Sildenafil 1-2mg/kg PO q8h.
- Utilize Hydrocodone if needed for quality of life.
- Close monitoring of breathing rates is advised to determine if/when Lasix is necessary.
- 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.

**PLAN**

- Recheck renal values and BP in 1-2 weeks, then every 3-4 months lifelong.
- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.



Mass Veterinary  
Services



**SonoPath**  
Clinical Sonography & Telectylogy  
EDUCATIONAL TELECONSULTATION SERVICES™  
1-800-838-4268 info@sonopath.com SonoPath.com

**PATIENT**

Gia Persad

**SPECIES**

Canine

**BREED**

Pomeranian Mix

**SEX**

Female Spayed

**AGE**

11 years

**WEIGHT**

17.5lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING  
PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary  
Services

**REFERRING VET**

Dr. Masloski

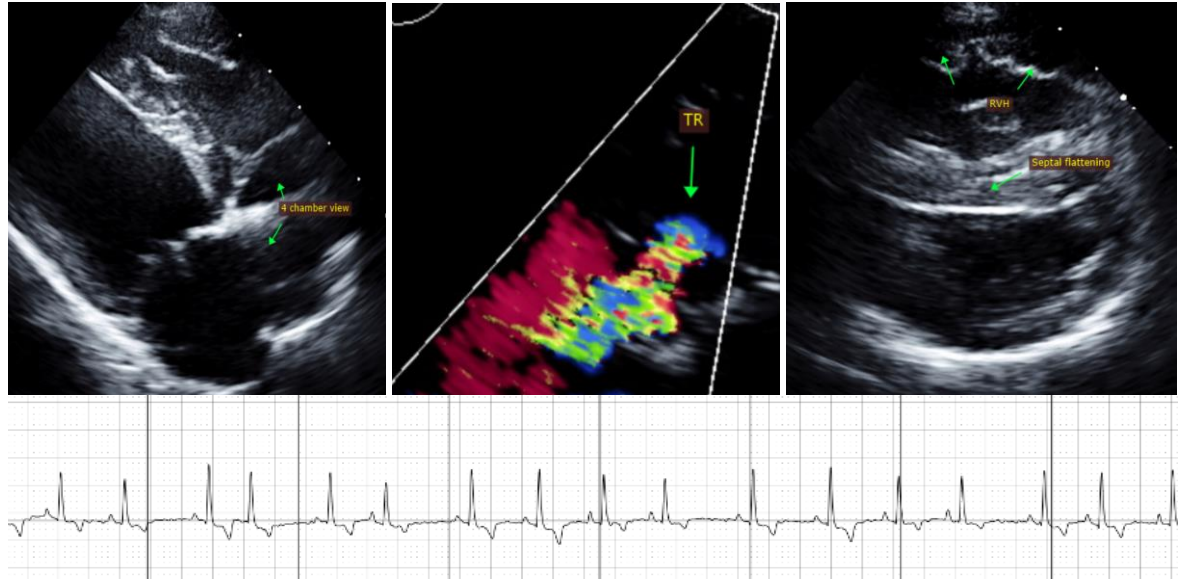
**INVOICE**

28990

**DATE**

2/14/23

**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.

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

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