



**PATIENT**

Clara Zamora

**SPECIES**

Canine

**BREED**

Toy Poodle

**SEX**

Female Spayed

**AGE**

8 years

**WEIGHT**

7.75lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING  
PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary  
Specialty Services

**REFERRING VET**

Dr. Masloski

**INVOICE**

20815

**DATE**

8/31/21

**PRESENTING CLINICAL SIGNS**

History: Clara has been coughing at home during the daytime, evening and after drinking water. No labored breathing or collapse episodes. Good appetite and energy. CV/RESP: NSR, grade I/VI murmur with PMI left apical area, PSS, lung fields clear. BP: 100mmHg x 3. \*No sedation.

**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 mildly dilated.

**Mitral valve:** The mitral valve is mildly thickened with mild prolapse into the left atrial lumen. Mild mitral regurgitation. 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.

**Right atrium:** Prominent RA.

**Tricuspid valve:** The tricuspid valve appears mildly thickened with mild septal prolapse and mild to moderate tricuspid regurgitation. Velocity consistent with early pulmonary hypertension.

**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 120bpm.

**2-Dimensional Measurements**

Ao diam (cm)	1.0
LA diam (cm)	1.4
LA:Ao (Swe)	1.4
IVS thickness (cm)	0.46
LVID diastole (cm)	2.2
PW thickness (cm)	0.46
LVID systole (cm)	1.0
FS (%)	55

**Doppler Measurements**

PV Vmax (m/s)	0.84
AoV Vmax (m/s)	1.0
MR Vmax (m/s)	5.7
TR Vmax (m/s)	3.2
TR PG (mmHg)	42

**INTERPRETATION OF THE FINDINGS**

The cause of the murmur is chronic degenerative valve disease causing mild mitral and mild to moderate tricuspid regurgitation. Lack of chamber enlargement indicates the current risk for complication is low. Mild pulmonary hypertension is identified, which is likely developing secondary to the reported cough. No concurrent issues such as systolic dysfunction are noted in this study. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1).

Given these findings, the cough is certainly non-cardiogenic in origin. Respiratory disease is considered most likely, and screening chest radiographs may be helpful as a baseline. If the cough is poorly controlled/progresses long term, this can certainly lead to



**PATIENT**  
Clara Zamora

worsening of PAH. Clinical signs of significant PAH include exertional dyspnea/collapse. Continued monitoring is advised. Cough control is recommended lifelong (hydrocodone, intermittent AI prednisone, fluoroquinolone for acute flare up, etc.).

**SPECIES**  
Canine

**RECOMMENDATIONS**

- In a dog without significant atrial enlargement, no cardiac medications are clearly indicated.

**BREED**  
Toy Poodle

- Continue hydrocodone as needed; consider more aggressive dose/frequency.
- Consider further respiratory work-up/treatment as discussed.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.

**SEX**  
Female Spayed

- No cardiac contraindication for general anesthesia. Pre-oxygenate for five minutes and recover in O2 if possible. Mild IV fluid restriction is advised.

**AGE**  
8 years

- Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

**WEIGHT**  
7.75lbs

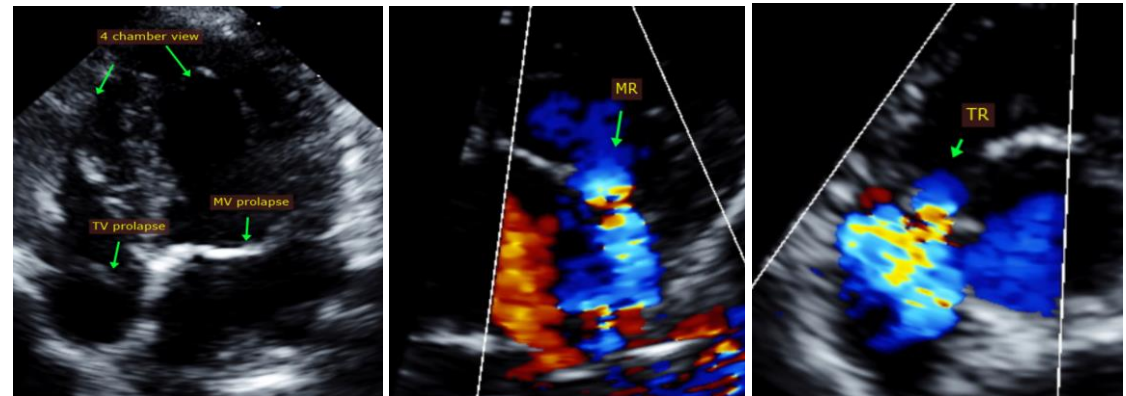
**PLAN**

- Recommend conservative monitoring with a recheck echocardiogram in 6-12 months, sooner if any development of clinical signs.

**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.**

**REFERRING VET**

Dr. Masloski

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**

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**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)