



**PATIENT**

Chico Rosa

**SPECIES**

Canine

**BREED**

ChihuahuaMix

**SEX**

Male Neutered

**AGE**

12 years

**WEIGHT**

26lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING**

**PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary  
Services

**REFERRING VET**

Dr. Masloski

**INVOICE**

30333

**DATE**

4/19/23

**PRESENTING CLINICAL SIGNS**

History: Chico was noted to have a heart murmur several years ago. He recently had a collapse episode while out walking. He has been coughing several times a day. Chest films taken in December revealed cardiomegaly. He also pants a great deal. His appetite has been on and off and his activity level is somewhat subdued. He was started on pimobendan and Lasix but was taken off the Lasix after one week. On exam: Obese. NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear, no cough with tracheal pressure, clear mm pink, moist, CRT < 2. BP: 100-110mmHg. Current medications: 1) Pimobendan/vetmedin 5mg 1 tab twice a day 2) Lasix/furosemide 12.5mg----not currently giving \*No sedation for study.

**ECHOCARDIOGRAM FINDINGS**

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

**Left ventricle:** The LV diameter is mildly increased with adequate 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.

**Right atrium:** Normal RA dimension.

**Tricuspid valve:** The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. No velocity.

**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 140bpm.

**2-Dimensional Measurements**

Ao diam (cm)	1.6
LA diam (cm)	2.6
LA:Ao (Swe)	1.6
IVS thickness (cm)	0.8
LVID diastole (cm)	3.1
PW thickness (cm)	0.8
LVID systole (cm)	1.4
FS (%)	55

**Doppler Measurements**

PV Vmax (m/s)	0.93
AoV Vmax (m/s)	1.3
MR Vmax (m/s)	6.7
TR Vmax (m/s)	2.7
TR PG (mmHg)	30

**INTERPRETATION OF THE FINDINGS**

Chronic degenerative valve disease causing moderate mitral and mild tricuspid regurgitation. Mild to moderate left atrial enlargement indicates there is relatively low risk for imminent complication; however, risk for progression to spontaneous congestive heart failure in the future is elevated. No additional issues are identified.

Given LA dilation, continued Pimobendan is reasonable going forward. Assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).

The cough is suspected to be due to a combination of mainstem bronchi compression and potentially airway disease in this predisposed breed. Screening CXR, hydrocodone, etc. may be useful.



**PATIENT**  
Chico Rosa

An exertional collapse episode may or may not be cardiogenic in origin. Typically, this is not closely correlated with other possibilities more likely (such as hypoxia due to obesity, etc.). If the episodes recur in the future, further evaluation may be reasonable.

**SPECIES**  
Canine

**RECOMMENDATIONS**

- Continue Pimobendan 0.3mg/kg PO q12h.
- Consider CXR, hydrocodone, etc. as discussed.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- 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.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

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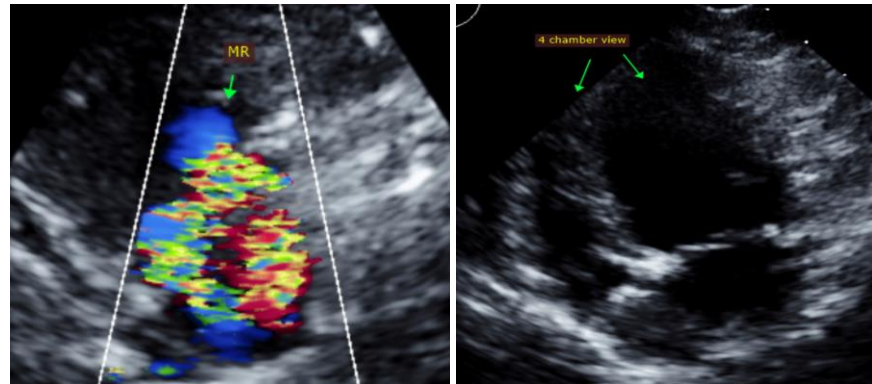
**PLAN**

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

**IMAGES**

**INTERPRETED BY**

Maggie Machen Lamy, DVM  
DACVIM (Cardiology)



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Pamela Harrigan, RDCS

**HOSPITAL NAME**

Mass Veterinary Services

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**

30333

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

**DATE**

4/19/23

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