



**PATIENT**  
Odie Archambeau

**PRESENTING CLINICAL SIGNS**

History: Odie was noted to have a heart murmur in December 2018. Occasional cough. Good appetite and normal activity level. On exam: NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear. BP: 120-130mmHg. \*Sedated with propofol for study.

**SPECIES**  
Canine

**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, 20mm/mV. The average heart rate is 110bpm (range 63-166bpm). The rhythm is sinus in origin, with a p for every QRS complex and vice versa. P and QRS morphologies are positive. Rare isolated APCs are identified throughout; singles only. No VPCs, pauses or other dysrhythmias observed. ECG diagnosis: Respiratory sinus arrhythmia with isolated APCs.

**BREED**  
Chinese Crested

**SEX**

Male Neutered

**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 normal.

**Mitral valve:** The mitral valve is mildly thickened with no prolapse into the left atrial lumen. Mild 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:** Mild RV enlargement.

**Right atrium:** Mild RA enlargement.

**Tricuspid valve:** The tricuspid valve appears thickened with septal prolapse and moderate tricuspid regurgitation; normal 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.

**AGE**

12 years

**WEIGHT**

19.1lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**2-Dimensional Measurements**

Ao diam (cm)	1.5
LA diam (cm)	1.7
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.65
LVID diastole (cm)	2.5
PW thickness (cm)	0.70
LVID systole (cm)	1.7
FS (%)	32

**Doppler Measurements**

PV Vmax (m/s)	1.0
AoV Vmax (m/s)	1.1
MR Vmax (m/s)	5.0
TR Vmax (m/s)	2.3
TR PG (mmHg)	22

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary Services

**REFERRING VET**

Dr. Masloski

**INTERPRETATION OF THE FINDINGS**

The cause of the murmur is chronic degenerative valve disease causing mild mitral and moderate tricuspid regurgitation. Mild right atrial enlargement indicates the current risk for complication is low. It is somewhat unusual to see TR greater than MR quantitatively without significant pulmonary hypertension; however, the velocity measures normal. No additional issues are identified, and the left atrium is normal.

**INVOICE**

24519

Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1).

**DATE**

6/1/22



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The ECG does confirm isolated APC's, which are a very non-specific finding. They can develop secondary to significant cardiac disease (mild in this study) or be extra-cardiac in origin; i.e., due to pain, stress, inflammation, cancer, GI disease etc. In this patient with mild disease as well as neoplasia, a combination is suspected. Regardless, no therapy is indicated at this time and simple monitoring is advised going forward. A holter should be considered if any associated clinical signs are noted (acute lethargy, collapse).

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**RECOMMENDATIONS**

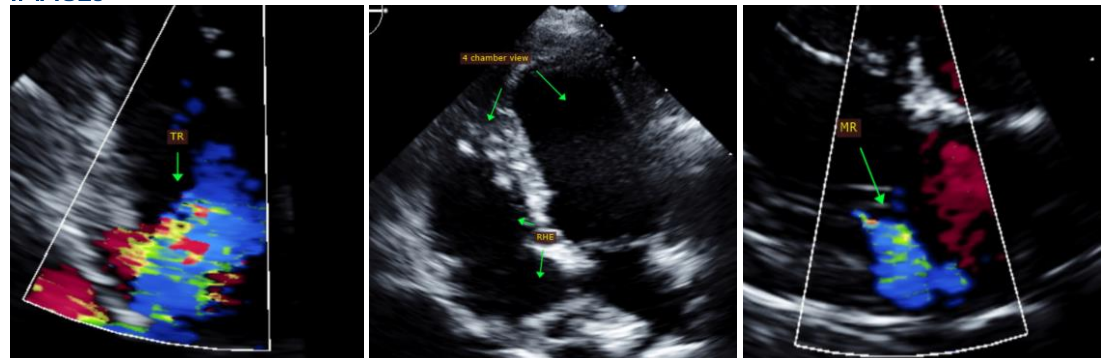
- Given these findings, no cardiac medications are clearly indicated.
- Consider a holter monitor if indicated.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine 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.

**PLAN**

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

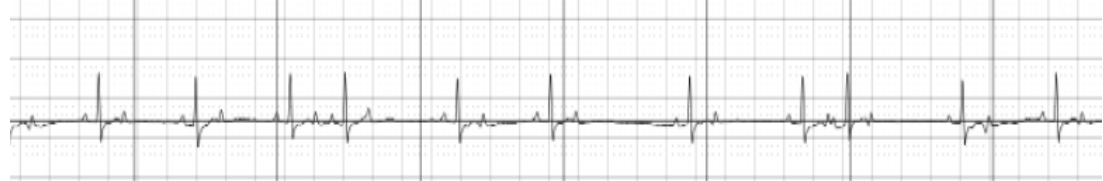
**IMAGING PERFORMED BY**  
Pamela Harrigan,  
RDCS

**IMAGES**



**HOSPITAL NAME**  
Mass Veterinary Services

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Mass Veterinary  
Services



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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.

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Canine

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.

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Chinese Crested

Maggie Machen Lamy, DVM  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
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**SEX**  
Male Neutered

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

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