



**PATIENT**

Dirac Prieto

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Male Neutered

**AGE**

17.5 years

**WEIGHT**

10.1lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Kelly Romero

**HOSPITAL NAME**

Midtown Veterinary  
Medical Center

**REFERRING VET**

Dr. McCarthy

**INVOICE**

27988

**DATE**

12/13/22

**PRESENTING CLINICAL SIGNS**

History: New 3/6 heart murmur. History of mild elevation in SDMA. Currently treated with methimazole oral for hyperthyroidism diagnosed years ago, T4 WNL currently. Intermittent arrhythmia/pause auscultated and noted during the echo. BP: 150mmHg.

**ELECTROCARDIOGRAPHIC FINDINGS**

A six lead ECG is available at 50mm/s; 20mm/mV. Lead II is not recorded, making standardized measurements difficult. The average heart rate is 180bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave is inverted suggesting atypical positioning or lead placement. A single premature beat is suspected, follow by a brief pause. No additional abnormalities are identified. ECG diagnosis: Normal sinus rhythm with a single VPC.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. There is a diffusely hyperechoic endocardium consistent with age-related fibrosis. Minimal remodeling. The papillary muscles are hyperechoic. The left atrium is normal in size. The right atrium is normal in size. The right ventricle appears normal. The mitral valve is normal in structure and mobility. No MR. The tricuspid valve appears normal in structure and mobility. No TR. Blood flow through both the LVOT and RVOT are normal in velocity. No effusions. No obvious cardiac tumors.

**CARDIAC CHART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) <small>(Moise, Pipers)</small>	LVIDd (cm) <small>(Moise, Pipers)</small>	LVWd (cm) <small>(Moise, Pipers)</small>	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.6	NM	0.46	1.2	0.43	68	96
FELINE CARDIAC PARAMETERS	LA/AO <small>(Boon)</small>	LA/AO HEART BASE (Swe) <small>(Abbott)</small>	LA 2D short axis Base view (cm) <small>(Abbott)</small>		LVOT VEL <small>(m/s)</small>	RVOT VEL <small>(m/s)</small>	E max <small>(m/s)</small>
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	1.1	1.2	1.1		0.7	0.7	NM
<p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i> Adapted from June Boon, Veterinary Echocardiography, 1998 Abbott J &amp; MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.</p>							

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Overtly normal geriatric cardiac structure and function. Mild fibrosis of the left ventricular wall is noted, which is likely a normal age-related variant. No significant valve leaks are noted, and flow through the great vessels is normal in velocity. No definitive cause is identified for the murmur in this study, making it likely physiologic in origin (i.e., secondary to tachycardia, volume changes, etc.). Given these findings and a normal LA dimension, no medications are indicated.



**PATIENT**

Dirac Prieto

The ECG is largely unremarkable with a single ventricular premature contraction (VPC). Given a lack of structural disease, other possible causes should be considered in this geriatric cat. These include a normal stress response or brewing systemic illness. No treatment is warranted based upon the infrequency of what is seen here. Monitor for signs of sustained arrhythmias, such as acute collapse.

**SPECIES**

Feline

No cardiac contraindication for general anesthesia. Should fluid or steroid therapy be indicated in the future, any cat should be monitored for intolerance (changes in RR/RE).

**BREED**

DSH

Monitor at home for signs of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes).

**SEX**

Male Neutered

Recommend recheck echocardiogram in 1 year to assess for any progressive issues or development of disease the pre-existing murmur may mask.

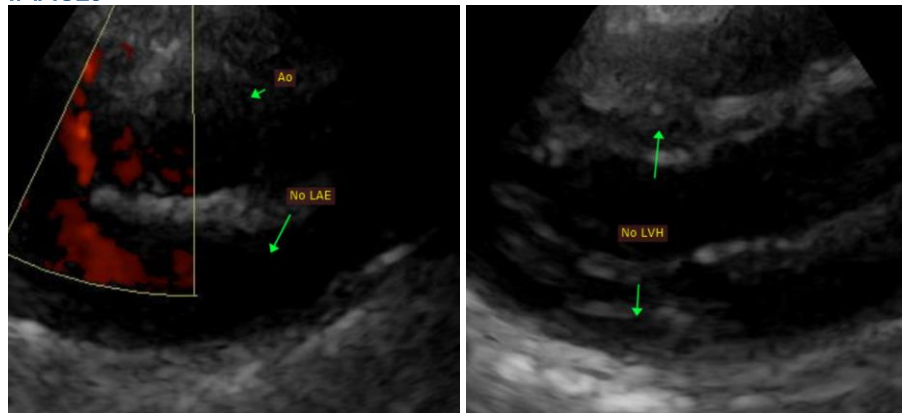
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17.5 years

**IMAGES**

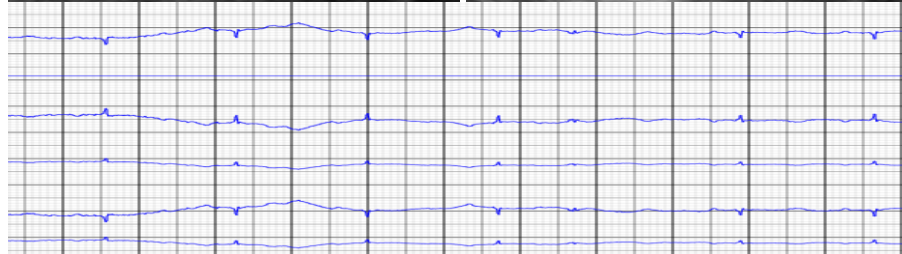
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**INVOICE**

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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.

**DATE**

12/13/22

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