



**PATIENT**

Pepperoncini Burton

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Female Spayed

**AGE**

11 months

**WEIGHT**

8lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Dana Alterman,  
RDCS, LVT

**HOSPITAL NAME**

Eubank Animal Clinic

**REFERRING VET**

Dr. Gardner

**INVOICE**

31927

**DATE**

7/18/23

**PRESENTING CLINICAL SIGNS**

History: Grade 3/6 heart murmur.

**ELECTROCARDIOGRAPHIC FINDINGS**

A six lead ECG is available at 25mm/s; 10mm/mV. The average heart rate is 170bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS is inverted. The MEA is shifted right. No ectopic beats, pauses or dysrhythmias observed.

ECG diagnosis: Normal sinus rhythm. Right axis deviation.

**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 mild fibrosis. The papillary muscles are normal in size and hyperechoic. The endocardium appears normal. 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. Normal flow through both the RVOT and LVOT. No obvious TR, AI or PI. No pleural or pericardial effusion seen. No obvious cardiac tumors.

**CARDIAC CHART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	3.6	NM	0.43	0.9	0.45	52	90
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	1.2	0.9		1.3	1.1	NM

*\*Note: All measurements based upon multi-modal images and methods. An average value is reported.*  
Adapted from June Boon, Veterinary Echocardiography, 1998  
Abbott J & 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.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Overtly normal cardiac structure and function. The LV wall thickness is normal and there is no evidence of elevated left atrial pressure. No obvious congenital issues are documented. No obvious cause for the murmur is identified in this study, suggesting a physiologic origin is likely. That being said, undiagnosed congenital murmurs are always of concern and referral should be considered for advanced imaging.

The ECG is largely normal with a normal sinus rhythm. A right axis deviation can be seen with right heart disease, which is not clearly appreciated in this study. Again, consider referral in this case. A BNP could be considered to potentially further support a non-diagnosed abnormality. If normal, suspicion is low.



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Given these findings, no medications are indicated. It is important to note that phenotypic HCM can develop at any phase of life in cats (particularly in this predisposed breed), and often does not accompany a heart murmur or PE abnormalities. Periodic screening is ideally recommended in all cats.

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No cardiac contraindication for general anesthesia at this time.

**BREED**

DSH

Recommend recheck echocardiogram in 1 year to assess for development of disease, sooner if a murmur/gallop or clinical signs develop in the interim.

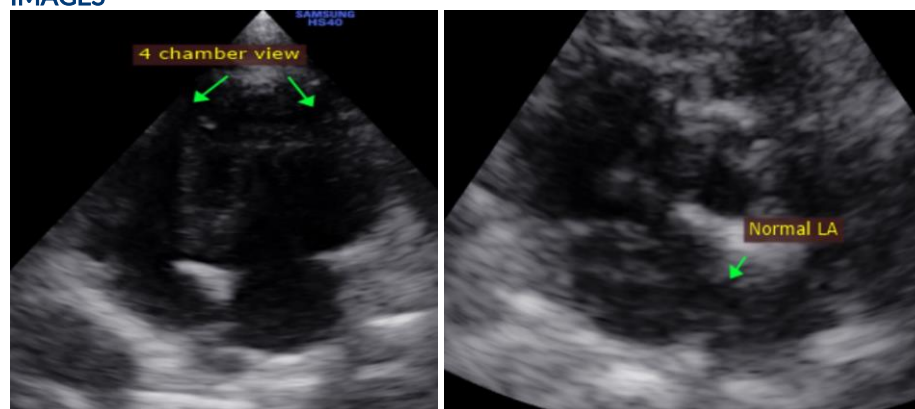
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Female Spayed

**IMAGES**

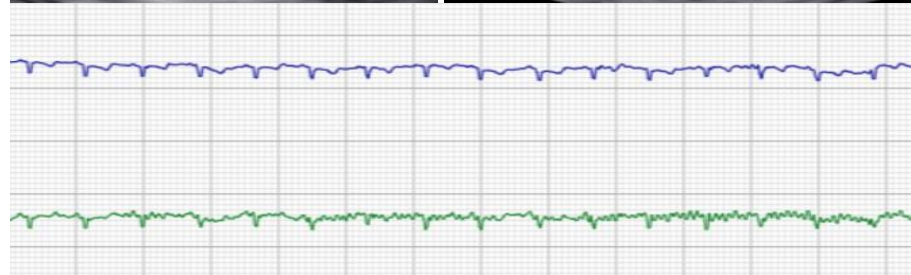
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**HOSPITAL NAME**

Eubank Animal Clinic

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.

**REFERRING VET**

Dr. Gardner

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

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