



**PATIENT**

Neo Halvorson

**SPECIES**

Feline

**BREED**

DLH

**SEX**

Neutered Male

**AGE**

7 Years

**WEIGHT**

12.6 Pounds

**INTERPRETED BY**

Sara Brethel, DVM,  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Dr. Andrea Nason

**HOSPITAL NAME**

Caravan Vet

**REFERRING VET**

Dr. Andrea Nason

**INVOICE**

36851

**DATE**

4/27/26

**PRESENTING CLINICAL SIGNS**

History: Neo has a persistent grade 3 parasternal heart murmur  
Echocardiogram to assess for underlying heart disease

ECG attached. Chest radiographs will be emailed

Abnormal PE/Chem/CBC/UA Results: T4 2.1 Crea 1.7 BUN 24 BNP 37 Blood pressure 190 systolic

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
<b>NORMAL PARAMETER</b>	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
<b>PATIENT</b>	5.72	NM	0.58	1.69	0.53	69.82	NM
FELINE CARDIAC PARAMETERS	LA/AO (M-mode)	LA/AO HEART BASE (Sisson)	LAD LA MAX 4 Chamber		LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)
<b>NORMAL PARAMETER</b>	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
<b>PATIENT</b>	--	1.12	NM		NM	NM	NM
Adapted from June Boon, Veterinary Echocardiography, 1998 Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705							

LVIDs: 1.51

**Chest Radiographic Interpretation**

Normal thoracic study without evidence of cardiogenic pulmonary edema.

**ECG Interpretation**

Normal sinus rhythm

**Cardiac Presentation**

The mitral valve leaflets are normal and there is no mitral regurgitation. The left atrial size is normal. There is no evidence of systolic anterior motion of the mitral valve and no evidence of a left ventricular outflow tract obstruction. Left ventricular systolic and diastolic function is within normal limits. There is equivocal evidence of left ventricular concentric hypertrophy. There is normal right atrial size without evidence of tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension on the images provided. The right ventricle appears normal in structure and function subjectively. The aortic and pulmonic valves have normal morphology. There is no evidence of pulmonic or aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.



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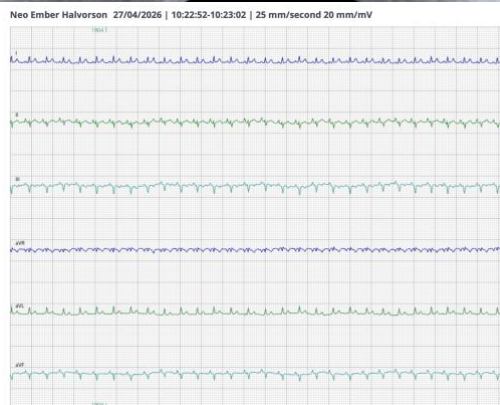
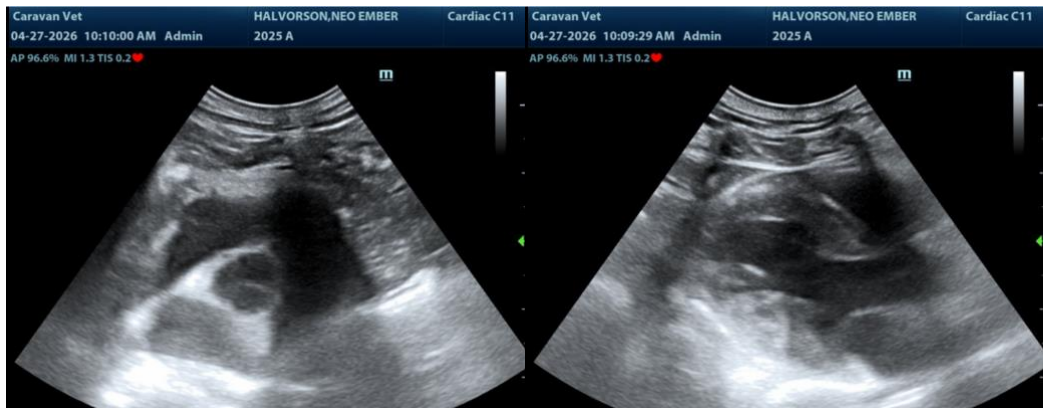
4/27/26

## ULTRASONOGRAPHIC FINDINGS

- Structurally normal heart

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The heart is structurally normal; however, the measurements are in a gray zone. Anything between 5.0 mm – 6.0 mm is technically normal, but considered equivocal, which is where this patient falls. No cardiac therapies are recommended at this time; however, serial monitoring is recommended. I recommend keeping an eye on the patient's blood pressure and thyroid hormone. The blood pressure reported is elevated and it's recommended to ensure this value does not represent systemic hypertension. Recommend following ACVIM guidelines for systemic hypertension and treating if indicated with either ace inhibitors, amlodipine, or a combination of the two therapies.



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

Thank you for this referral. 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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Sara Brethel DVM, DACVIM (Cardiology)

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[info@SonoPath.com](mailto:info@SonoPath.com)

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