



**PATIENT**

Ari Glein

**SPECIES**

Feline

**BREED**

Manx

**SEX**

Spayed Female

**AGE**

10

**WEIGHT**

14 Pounds

**INTERPRETED BY**

Sara Brethel, DVM,  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Dr. Andrea Nason

**HOSPITAL NAME**

Caravan Vet

**REFERRING VET**

Dr. Andrea Nason

**INVOICE**

35406

**DATE**

11/4/25

**PRESENTING CLINICAL SIGNS**

History: Ari presented to an ER ~ 1 month ago for sudden forelimb lameness. Diagnostics were suggestive of a heart condition, potentially primary or secondary. She was started on clopidogrel and enalapril. At a follow up visit, she had a proBNP done and chest radiographs that were consistent with CHF. The enalapril was discontinued, furosemide was started, clopidogrel was continued. Clinically, Ari was/has been doing very well at home. Cardiac work up to evaluate for underlying condition and if therapy needs to be adjusted. Current medications: Methimazole 1.25 mg BID, clopidogrel ~18 mg SID, Furosemide 6.25 mg BID, kidney diet.

Abnormal PE/Chem/CBC/UA Results: Blood pressure 110 systolic ProBNP 685 Crea 2.2, BUN 27, SDMA 12; UPC 0.1 T4 in September 5.5, T4 ~ 2 weeks ago 2.8 on methimazole.

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT	6.3	NM	0.63	1.55	0.76	--	--
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/)	
NORMAL PARAMETER	<1.5	1.6	0.7-1.7	<1.6	<1.3	40-60	
PATIENT	--	2.5	--	--	~0.8	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							

MR VMAX: ~ 4.0

**Radiographic Study of the Chest**

There is significant enlargement. The pulmonary vasculature is normal. There is no evidence of cardiogenic pulmonary edema on the images provided.

**ECG Interpretation**

Sinus rhythm with tall r-waves.

**Cardiac Presentation**

The left atrium is severely enlarged. The mitral valve leaflets are normal and there is mild mitral regurgitation. There is no evidence of systolic anterior motion of the mitral valve. There is concentric



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hypertrophy of the left ventricle. The right atrium is normal. The tricuspid valve is normal without evidence of tricuspid regurgitation. The right ventricle appears to have preserved systolic function subjectively. The aortic and pulmonic valves are normal without evidence of insufficiency. Aortic and pulmonic outflow velocities are within normal limits. The aorta and PA are normal along with the associated PA branches. There is no evidence of pleural effusion. There is scant pericardial effusion. An intracardiac mass is not identified.

**ULTRASONOGRAPHIC FINDINGS**

- Left ventricular concentric hypertrophy
- Severe left atrial enlargement
- Scant pericardial effusion
- Mitral regurgitation
- Tall r-waves

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The patient has left ventricular concentric hypertrophy. In the face of normotension and the patient being euthyroid, this does suggest primary underlying HCM. Given the left atrial enlargement and reported clinical signs, the patient is classified as a stage C with congestive heart failure.

The radiographs provided do not show evidence of active heart failure, therefore, as long as the patient's breathing rates are doing well and the patient is tolerating therapies, recommend remaining on the current dose of furosemide.

The reported blood work shows a discordant creatinine with the BUN. Typically, renal diets are not recommended for cardiac patients due to the need for the additional protein because they are at higher risks of cardiac cachexia but recommend weighing pros vs cons given the patients creatinine.

Recommend continuing the clopidogrel therapy (1/4 of a 75 mg tablet once daily). A clot is not identified, nor is spontaneous echo contrast seen in the images provided, therefore, additional thrombolytic therapy is not recommended. Recommend no signs of trauma are occurring to the 4 limbs, as a partial clot cannot be ruled out due to the severity of the left atrial enlargement.

Can consider the re-addition of the ace inhibitor, as long as the kidney values are holding steady and the patient is tolerating other therapies.

Can consider investigating into a clinical trial called the CARE clinical trial and looking into institutions. This trial is specifically for heart failure patients without significant concurrent other systemic diseases.

Due to the severity of the cardiac disease, recommend continued long term care with a veterinary cardiologist. If that is not feasible, 2-3 weeks after starting ace inhibitors, recommend rechecking kidney values.



## PATIENT

A recheck echo is recommended in about 2-4 months, sooner if the patient is decompensating or worsening.

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## SPECIES

The client should start monitoring respiratory rate and effort at home if not already doing so. The resting respiratory rate should be < 35-40 breathes/minute when the patient is resting or sleeping. If the breathing rates are increasing, then chest radiographs are recommended.

Feline

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Manx

## SEX

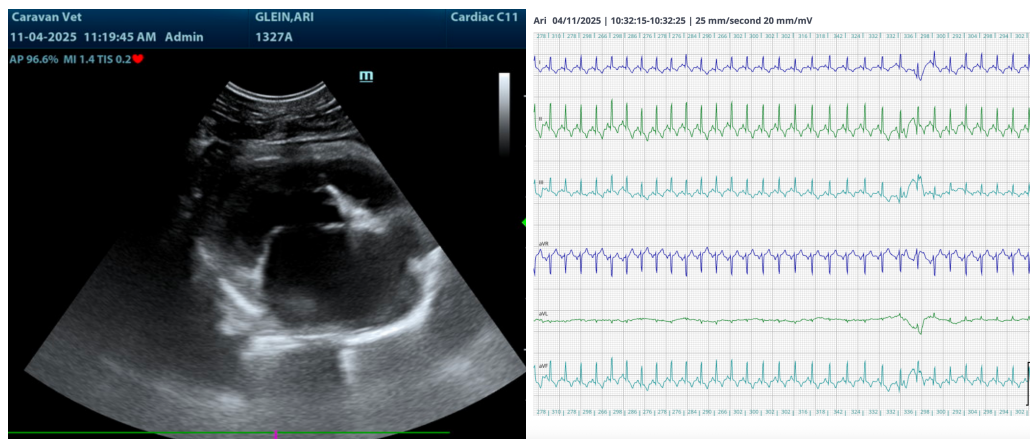
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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DACVIM (Cardiology)

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.

## IMAGING PERFORMED BY

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

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