



**PATIENT**

Tyra Bub Sullivan

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

21 Years

**WEIGHT**

11.8 Pounds

**INTERPRETED BY**

Sara Brethel, DVM,  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Dr. Andrea Nason

**HOSPITAL NAME**

Caravan VS

**REFERRING VET**

Dr. Andrea Nason

**INVOICE**

35413

**DATE**

1/15/26

**PRESENTING CLINICAL SIGNS**

History: Tyra has had a grade 2 heart murmur since at least 2021. She had an echo with a cardiologist at that time that showed a false tendon in the LV but no other abnormalities. Her proBNP in Dec 24' was 600 and is now 1500. She has kidney disease and gets 100 mls of fluids q48 hours. Cardiac work up to re-evaluate for underlying heart disease - can she continue to have 100 mL fluids q48 hours, if she's early HCM would she be a candidate for Felycin-CA1.

Abnormal PE/Chem/CBC/UA Results: Dec 2024 - BNP 600, Crea 3.1, BUN 40 Jan 2025 - BNP 1500, Crea 3.1, BUN 45, SDMA 24.

*\*\*The CXR images provided are not a document type that I can open.*

**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	5.36	NM	0.47	1.25	0.75	45.6	--
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	NM	1.6	--		NM	0.5	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: 0.68

**ECG Interpretation**

Normal sinus rhythm

**Cardiac Presentation**

The left atrium is mildly enlarged. The mitral valve leaflets are normal and there is no mitral regurgitation. There is no evidence of systolic anterior motion of the mitral valve and no evidence of a left ventricular outflow tract obstruction. There is concentric 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



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limits. The aorta and PA are normal along with the associated PA branches. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

## ULTRASONOGRAPHIC FINDINGS

- Left ventricular concentric hypertrophy
- Mild left atrial enlargement

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient has evidence of left ventricular concentric hypertrophy and is classified as a stage B2 due to the increased left atrial size. If not already performed, it is recommended to ensure that patient's blood pressure is normal, and the patient is euthyroid. Clopidogrel therapy at 18.75mg (75mg tablet: ¼ tablet by mouth every 24 hours) is recommended to help reduce the risk for a blood clot. Since this can be a progressive condition, serial monitoring is recommended. It's recommended to recheck an echocardiogram in 6 months, sooner if the patient develops cardiovascular clinical signs.

Given the mild changes to the left atrium, the patient is at a mildly increased risk for subcutaneous fluids, however, if the patient's kidney disease requires it, then this therapy can be continued, as the long as the clients keep monitoring the breathing rates. 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.

The safety and efficacy of Felycin-CA1 in patients with underlying kidney disease has not been established nor reported. It is unknown if this is a safe medication given the patient's underlying systemic diseases.

### Addendum 1/20/26:

The left atrium is mildly enlarged, and the aorta is prominent. The pulmonary vasculature is normal. There does not appear to be evidence of cardiogenic pulmonary edema. There is an increased opacity in the caudal lung field, and the significance is unknown. Recommend considering submitting these images for a radiologist. If there are changes to the breathing rates, there is an increased concern for pulmonary edema, and I recommend stopping fluid therapy.



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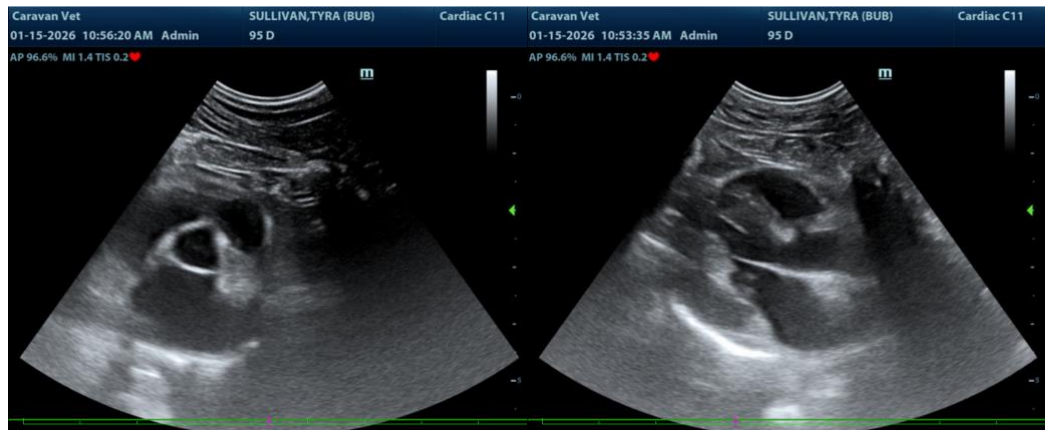
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Sara Brethel DVM, DACVIM (Cardiology)

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