


**PATIENT**

Rhino Alfaro

**PRESENTING CLINICAL SIGNS**

History: Grade 3/6 heart murmur. Previously diagnosed with diabetes but stopped giving insulin about 1.5 years ago. Assess prior to dental.

**SPECIES**

Feline

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall thickness is irregular without significant hypertrophy. Basilar septal region is borderline. There is a diffusely hyperechoic endocardium consistent with fibrosis and ventricular remodeling. The left ventricular chamber is normal in dimension. The papillary muscles appear mildly remodeled and asymmetric. The left atrium is normal in size. The right atrium is prominent. The right ventricle is irregular as well. The mitral valve is normal in structure and mobility. There is no mitral regurgitation present. Moderate tricuspid regurgitation is identified. Elevated velocity (3.3m/s). Blood flow through the LVOT is normal in velocity. Blood flow through the RVOT is mildly elevated. No PI or AI. No effusions or cardiac tumors identified.

**BREED**

DSH

**SEX**

Male Neutered

**AGE**

13 years

**CARDIAC CHART**
**WEIGHT**

12.07lbs

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	5.4	250	0.58	1.38	0.40	58	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	1.1	1.1	1.3	0.8	2.5	NM	

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

Crystal Hill, RVT

*\*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.

**HOSPITAL NAME**

 Village Centre Animal  
 Hospital

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The only abnormality identified is moderate tricuspid regurgitation. TR in cats is often physiologic, however in this case the volume is significant and there is a prominent right atrium making it more concerning. The velocity is consistent with early pulmonary hypertension, which is of unknown significance in a cat without respiratory disease. There is also an irregular LV with remodeling and fibrosis, which is of unknown relevance at this juncture. Additionally a dynamic RVOT obstruction is noted, which is a benign flow abnormality that may contribute to murmur intensity. No additional issues are identified.

**REFERRING VET**

Dr. Kunnath

**INVOICE**

29837

Given these findings, no medications are indicated. Prognosis is guarded prior to assessing for progression.

**DATE**

3/24/23

Anesthetic risk is considered mild. With this degree of remodeling and diastolic stiffening, there is an elevated risk for fluid overload in this patient and judicious IV fluid use is



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recommended. Heart rate stimulating drugs such as atropine, glycopyrrolate or ketamine should be avoided unless medically necessary.

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Monitor in the future for respiratory compromise, syncope/lethargy, or signs of a blood clot (paralysis, lameness).

Recommend recheck echocardiogram in 6-12 months to assess for progression.

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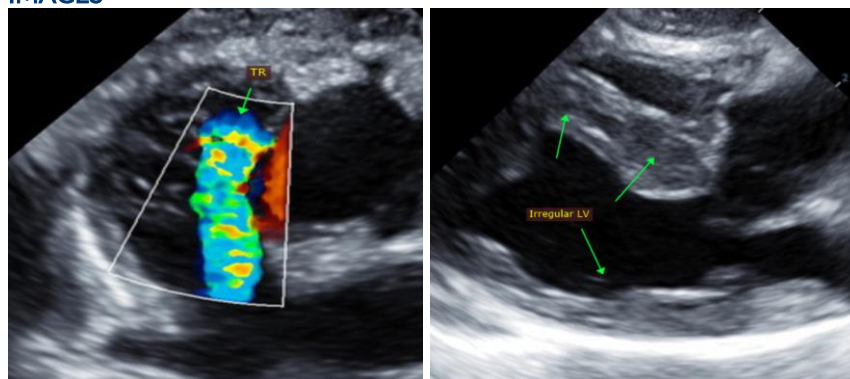
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**IMAGES**



**INTERPRETED BY**

Maggie Machen Lamy,  
DVM DACVIM  
(Cardiology)

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.

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.

**IMAGING PERFORMED BY**

Crystal Hill, RVT

**Maggie Machen Lamy, DVM**  
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