


**PATIENT**

Snowball Tierno

**PRESENTING CLINICAL SIGNS**

New grade I-II/VI systolic murmur auscultated 12/26/22.

**SPECIES**

Feline

Abnormal PE/Chem/CBC/UA Results: ProBNP 547; PLT 118

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**
**SEX**

FS

**AGE**

12yr

**WEIGHT**

11.2lb

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		170	0.5	1.52	0.54	45	80
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)		LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7		<1.6	<1.3	40-60
PATIENT	1.35	1.3	1.3		1.0	0.95	
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							

**INTERPRETED BY**

 R. McKenzie Daniel,  
 DVM, DABVP  
 (Canine and Feline)

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal left atrial size based on 3 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. No overt MR on Doppler. The left ventricle presented normal thicknesses with linear contour and was not dilated nor restricted. The myocardium presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. The contractility of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions and angles of the myocardium. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural integrity. Normal measured LVOT velocity was present. The right atrium and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated adequate linear morphology and kinetics. No overt TR on Doppler. The right ventricle was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. Pulmonic tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). Normal measured RVOT velocity was present. No visible pericardial or free pleural fluid was noted or extra cardiac pathology in the visible planes. The cranial mediastinum and pericardial regions were free of masses in the visible window. No evidence of arrhythmia.

**IMAGING PERFORMED BY**

Shari Reffi CVT

**HOSPITAL NAME**

ACC Flanders

**REFERRING VET**

Dr. Villari

**ULTRASONOGRAPHIC FINDINGS**

- Normal echocardiogram

**INVOICE**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No evidence of structural or functional cardiomyopathy was present in this study including no evidence of clinical issues such as HCM criteria, LV systolic dysfunction, clinical pulmonary

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hypertension, significant valvular insufficiencies or other structural cardiomyopathy. A definitive cause of the murmur was not obvious. If no volume changes such as dehydration or anemia are present, a benign physiologic flow murmur or small flow abnormality is suspected. Regardless, the lack of left or right heart chamber enlargement indicate that the hemodynamic effects of the murmur are minimal. No indication for cardiac medications. Continued conservative monitoring of the murmur is recommended. Recheck echocardiogram recommended in 6-12 months, sooner if murmur intensity increases or clinical signs suggestive of heart disease arise.

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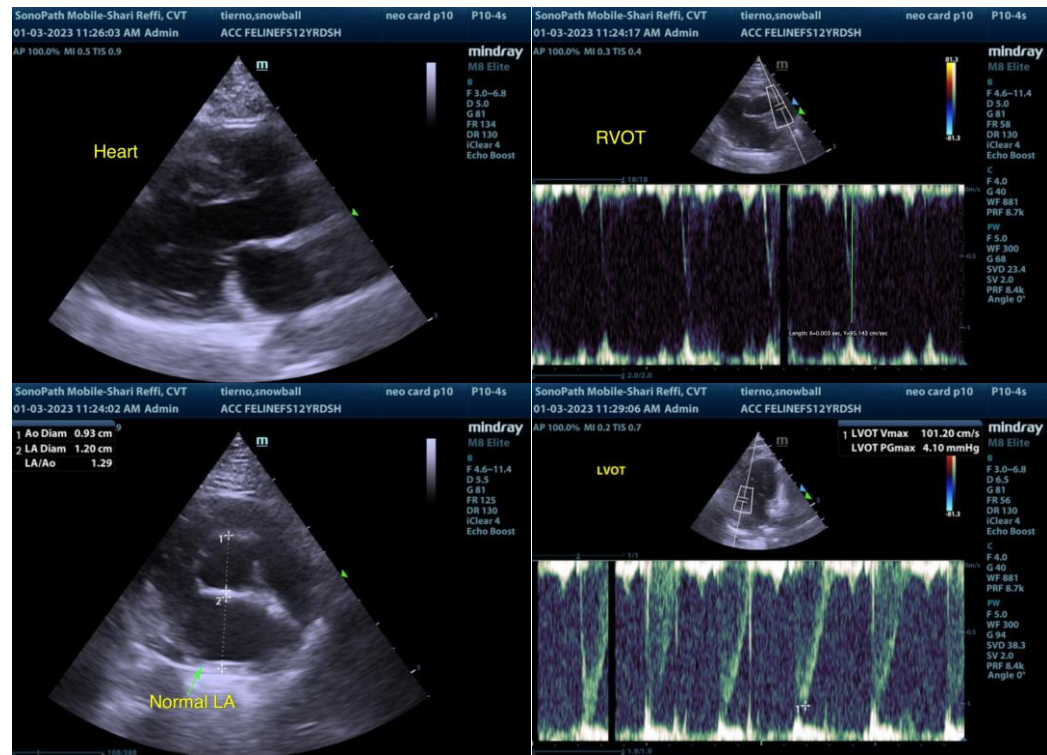
Dr. Villari

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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.

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