



PATIENT

Frankie McLaughlin

SPECIES

Feline

BREED

DLH

SEX

FS

AGE

14 years

WEIGHT

13 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Ebersole

HOSPITAL NAME

Scanvet

REFERRING VET

Dr. Fortin

INVOICE

14085

DATE

6/14/22

PRESENTING CLINICAL SIGNS

Heart murmur and chronic cough. Gabapentin PO for sedation.

Abnormal PE/Chem/CBC/UA Results: PE: BCS 7/9, Grade 1-2 systolic heart murmur.

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		196	0.47	1.71	0.48	50	85
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	1.33	1.21	1.45		1.28	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							

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. 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. **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. 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. 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). No visible **pericardial** or free pleura 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.

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function



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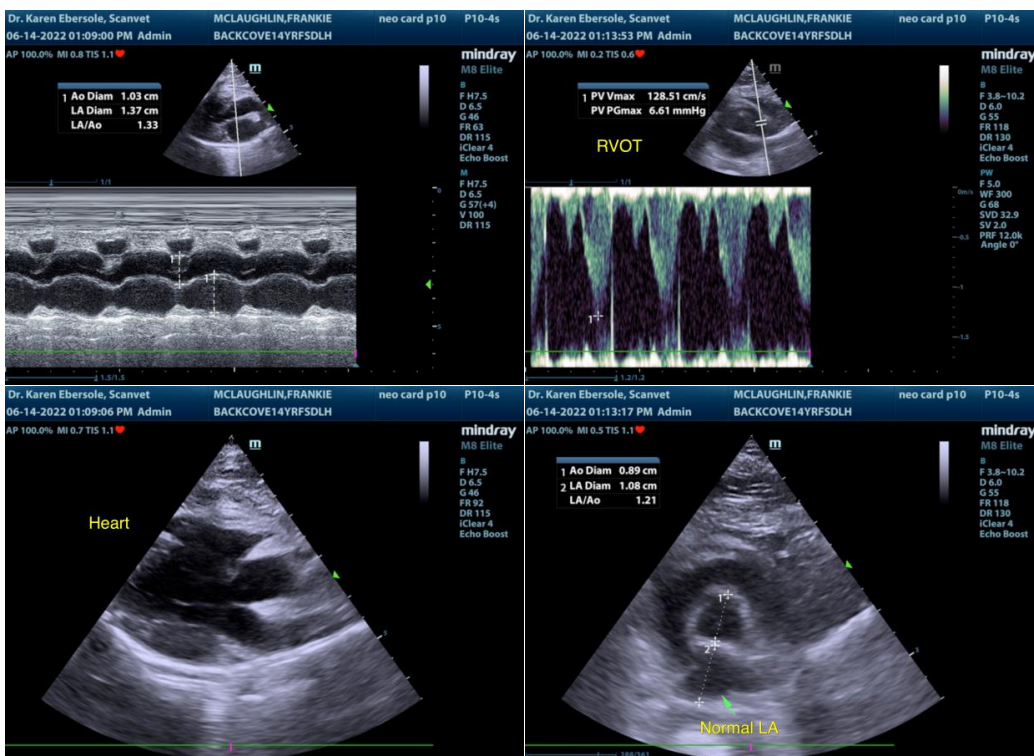
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This study revealed no evidence of overt structural or functional cardiomyopathy. No clinical issues such as LV systolic dysfunction, left or right heart chamber enlargement, or evidence of clinical pulmonary hypertension were noted.

A definitive cause of the murmur was not readily identified. In the absence of dehydration, i.e., volume changes or anemia, a physiologic benign flow murmur is suspected while the possibility of non-visualized small flow abnormality cannot be definitively excluded. Regardless, the normal cardiac presentation and lack of left or right heart chamber enlargement indicate that the hemodynamic effects of the murmur are low. No indication for cardiac medications. The cardiac presentation was not consistent with a cardiogenic cough. Consideration for primary upper or lower airway disease is indicated. Continued conservative monitoring of the murmur at this stage would be appropriate with recheck echocardiogram in 6-12 months, sooner if clinical signs consistent with heart disease arise or if murmur intensity progresses.



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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