



PATIENT

Murphy Cuchran

PRESENTING CLINICAL SIGNS

Syncopal episode, tachypnic.

Current meds: Methimazole 5mg sid

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

DLH

SEX

MN

AGE

12yr

WEIGHT

17.76lb

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		191	0.50	1.8	0.50	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	1.4	1.3	1.3	1.0	0.8		

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)

IMAGING PERFORMED BY

Shari Reffi CVT

HOSPITAL NAME

Newton Vet

REFERRING VET

Dr. Chun

INVOICE

13398ag

DATE

04/05/2023

Cardiac Presentation

The echocardiogram in this patient demonstrated enlarged 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 present on Doppler. The left ventricular septum and free wall revealed normal thicknesses, reduced contractility and mildly reduced left ventricular volume with subjective reduced diastolic filling. Some echogenic remodeling of the septum and free wall was present. This is most consistent with some level of myocardial fibrosis. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural integrity. The right atrium and auricle revealed increased size and normal content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated adequate linear morphology and kinetics. No overt TR present 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 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. Intermittent non-specific arrhythmia was present.

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure with mild LV myocardial remodeling.
- Normal LA.
- Intermittent arrhythmia.



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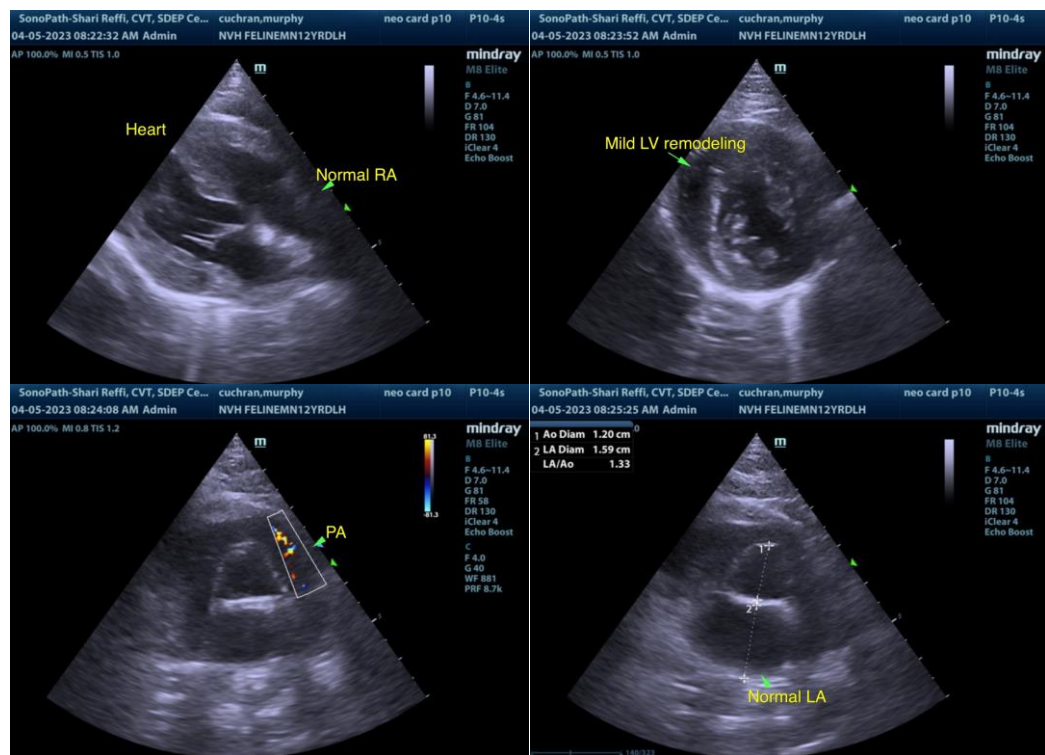
DATE

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of overt structural or significant functional cardiomyopathy as a definitive cause of the patient's syncopal episode or tachypnea. No evidence of HCM criteria, chamber enlargement, LV systolic dysfunction or evidence of clinical pulmonary hypertension. The intermittent arrhythmia is non-specific yet subjectively did not appear to significantly alter cardiac function or rhythm. ECG assessment is suggested for further clarification. Given the overall cardiac presentation the tachypnea is likely non-cardiogenic in origin. Consideration for primary upper/lower airway disease may be indicated.

No indication for medications for structural cardiomyopathy pending ECG assessment. Systemic BP evaluation suggested if not recently done. Recheck echocardiogram suggested as clinically indicated or if evidence of progressive arrhythmia.



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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