



PATIENT

Luna Clayton

PRESENTING CLINICAL SIGNS

new heart murmur 2/6 in Jan 2023; still present possible 3/6 now. On amlodipine 2.5 mg x 1/2 tab sid in pm. On Hills K/D.

SPECIES

Feline

Abnormal PE/Chem/CBC/UA Results: 2/24/23: BUN 33, crea 2.2, SDMA 18.2, amylas 1464, PPSL 33, chol 330, gluc 221, T4 2.9, Free T4 51.9, Na 152, K 3.5, Na/K 43. UA: pH 6, protein 2+, blood 1+, rbcs 21-50, gluc neg, USPG 1.025

BREED

DSH

SEX

FS

AGE

16yr

WEIGHT

10lb

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		240	0.4	1.72	0.4	55	88.4
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	<2.0	1.2		
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 evidence of significant MR on Doppler. The left ventricle presented normal thicknesses with mild alinear contour and was not dilated nor restricted. The myocardium presented overall normal echogenicity with mild myocardial remodeling yet without 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 subtle turbulent to dynamic flow on Doppler with normal subjective structural integrity. LVOT velocity within normal limits. 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. 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 with subjective mild heart base to pericardial fat.

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Whippany AH

REFERRING VET

Dr. Abe

INVOICE

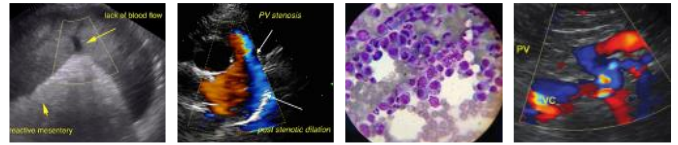
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DATE

03/23/2023

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function for age with minor LV myocardial remodeling.
- Normal LA/RA.



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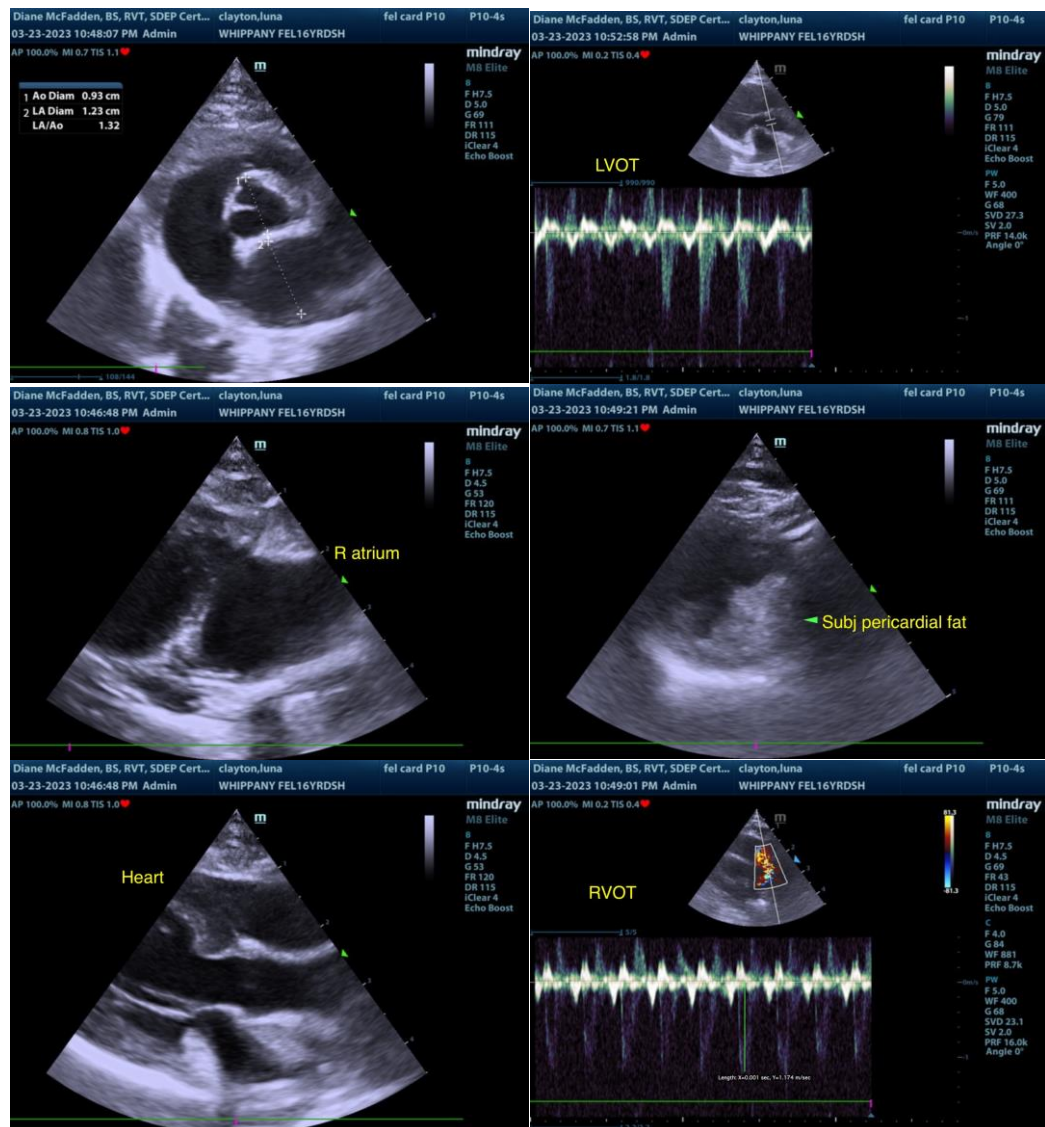
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of structural or functional cardiomyopathy was present in this study with subjective minor expected age related myocardial changes. No evidence of clinical issues such as HCM criteria, left/right heart chamber enlargement, clinical pulmonary hypertension or significant valvular insufficiencies present.

If no volume changes such as dehydration or anemia are present, a benign physiologic flow murmur or small non-visualized flow abnormality could be possible. 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 6-8 months, sooner if murmur intensity increases or clinical signs suggestive of heart disease arise.



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



PATIENT

visible in the image/video clips provided.

Luna Clayton

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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mac.daniel@sonopath.com

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