



PATIENT

Nora Washam

PRESENTING CLINICAL SIGNS

History: grade 2/6 left apical systolic murmur; arrhythmia; non clinical. assess for anesthesia for dental procedure. Iris stage I CKD

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

DLH

SEX

FS

AGE

14yr

WEIGHT

8.3lb

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		181	0.4	1.44	0.4	63.9	97
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	1.2	1.24	1.2		1.0	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							

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size and structure. Chamber volume and blood echogenicity were normal. The cranial and caudal mitral valve leaflets presented minor irregular age-related changes that are not clinically significant at this time with adequate extension in systole and union in diastole. The left ventricle presented normal free wall and septal thicknesses with linear contour. The myocardium presented some echogenic remodeling consistent with expected age-related change. Contractility of the ventricular walls was adequate and in normal range for this breed and patient size. The left ventricular outflow tract demonstrated minor turbulent to dynamic systolic flow with subjectively unremarkable structure. Mild aortic valve insufficiency present on Doppler. Subjective assessment of the right atrium and auricle revealed normal size, structure and content. No evidence of masses was noted. Tricuspid valvular assessment demonstrated expected findings for this age patient. Mild TV insufficiency present on Doppler. The right ventricle was of normal size (1/3 diameter of LV), echogenicity and thickness. Pulmonic tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No dilation due to heartworm disease, cor pulmonale, stenosis, or pulmonic hypertension was noted. No visible pericardial or free pleural fluid was noted. The mediastinum was free of masses in the visible window.

INTERPRETED BY

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

IMAGING PERFORMED BY

Daine McFadden

HOSPITAL NAME

Blairstown AH

REFERRING VET

Dr. Lovell

ULTRASONOGRAPHIC FINDINGS

INVOICE

11205ag

- Overtly normal cardiac structure and function for age with mild LV myocardial remodeling
- Mild TV/AV insufficiency

DATE

07/27/2022



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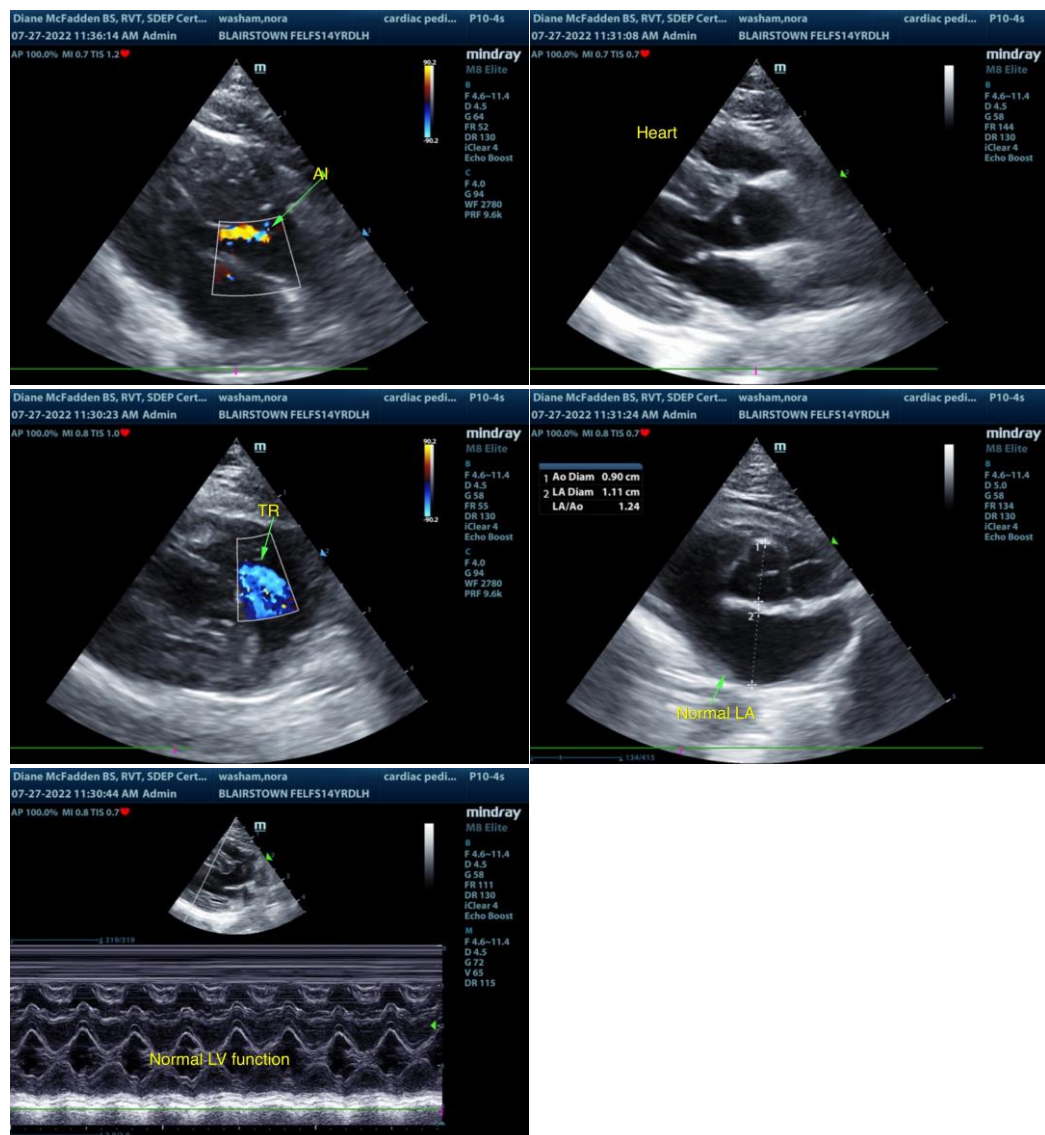
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No overt evidence of structural or functional cardiomyopathy was present in this study. A definitive cause of the murmur was not obvious as the mild TV/AV insufficiency are not likely audible. A potential physiologic or flow murmur is suspected. Given the lack of left or right heart chamber enlargement the effects of the murmur appear to be minimal. No indication for cardiac medications.

Assessment of systemic BP is suggested to rule out evidence of hypertension given the AV insufficiency. Assuming no evidence of systemic hypertension and pending ECG assessment, no overt anesthetic contraindications for this patient.

A recheck echocardiogram is suggested in 6 months, sooner if murmur intensity increases or if clinical signs suggestive of heart disease arise.

Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.





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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.

SPECIES

Feline

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

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info@SonoPath.com

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