



PATIENT

Caros Lewis

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

17 years

WEIGHT

5.9 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dave Stasiuk RDMS,
RDCE

HOSPITAL NAME

Resolution Vet
Ultrasound LTD

REFERRING VET

Dr. Lisa Hamill

INVOICE

12817

DATE

12/14/21

PRESENTING CLINICAL SIGNS

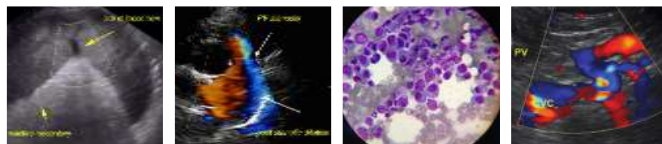
-Hyperthyroid- No meds for 6 months. Grade 2/6 murmur. Pre dental.

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		NM	0.56	1.41	0.52	39.7	73.7
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		2.8	2.0	1.0	1.0	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 severely increased **left atrial** size with evidence of spontaneous contrast (smoke), yet without evidence of formed thrombus. The cranial and caudal **mitral** valve leaflets presented minor irregular age-related changes to thickening with normal union in diastole, yet with minor insufficiency on color doppler assessment. The **left ventricle** presented overall normal free wall and septal thicknesses with mild alinear contour. Mild papillary muscle hypertrophy present. The **myocardium** presented some echogenic remodeling. **Contractility** of the ventricular walls was adequate yet borderline subnormal as evidenced by the fractional shortening measurement. The **left ventricular outflow** tract demonstrated normal laminar flow with subjectively unremarkable structure. 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. 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 visible **pericardial** or free pleural fluid was noted. The **mediastinum** and pericardial regionals were free of overt masses in the visible window.



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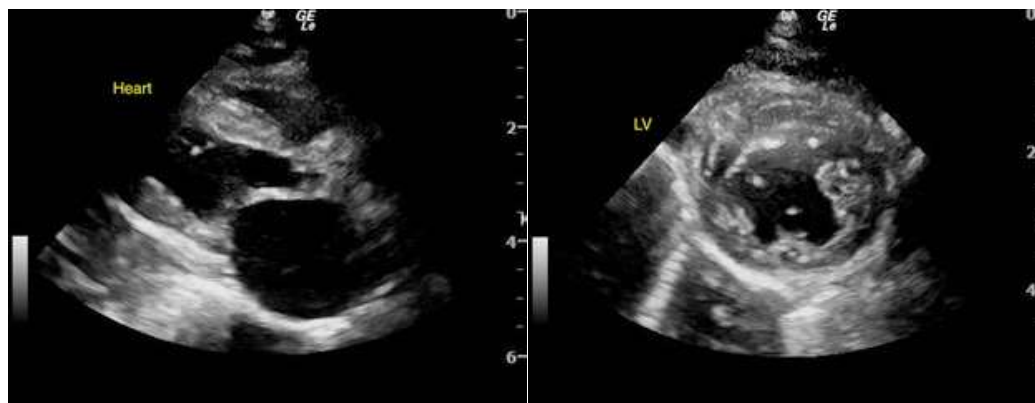
ULTRASONOGRAPHIC FINDINGS

Primary Findings

- IVS and LV free wall myocardial remodeling with subjective subnormal yet adequate systolic function
- Severe LAE with spontaneous contrast

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The echocardiogram in this patient revealed significant cardiomyopathy. Significantly advanced or potential end-stage hypertrophic cardiomyopathy, given the patient's history of nontreated hyperthyroidism, may be considered a primary differential diagnosis. Potential for unclassified or restrictive cardiomyopathy may also present in a sonographically similar manner. Regardless of classification, the severely enlarged left atrium indicates that the current and future risk going forward for congestive heart failure, thrombus formation, given the concurrent presence of spontaneous contrast, and sudden death is elevated. Pimobendan 1.25 mg PO BID, Clopidogrel 16.75 mg (1/4 75 mg tab), PO SID and diuretic 1.0 mg/kg PO BID is recommended. Baseline ECG and blood pressure is strongly suggested with serial monitoring of renal values. Recheck echocardiogram is suggested as needed, especially if evidence of congestive heart failure or thrombus formation. A very guarded to unfavorable long-term prognosis is indicated pending serial sonographic monitoring and clinical response to medical therapy.





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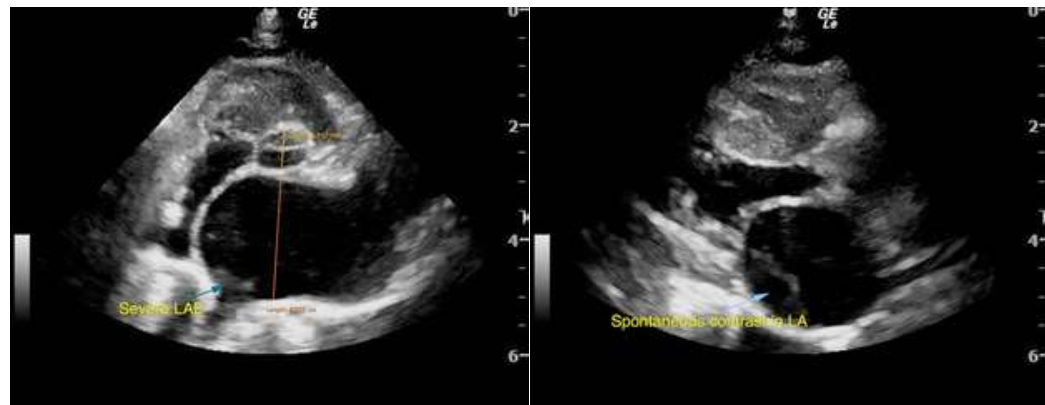
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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