



PATIENT

Twix Wasco

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

13yr

PRESENTING CLINICAL SIGNS

Presented 10/23 for weight loss, inappetence, lethargy. PE unremarkable besides BCS 4/9. Labs showed mixed hepatopathy, bilirubinuria, and elevated TT4. Started treatment for hyperthyroidism. Recheck 11/5, 0.5lb weight loss. Pt still lethargic & inappetent. Recheck labs show controlled TT4, but worsened hepatopathy. Hospitalized for supportive care, IVFT, and E-tube placement - top concern for liver failure. Respiratory effort & BP increased on fluids, discontinued overnight. Concern for cardiac etiology of ascites. Echo recommended prior to anesthesia for E-tube placement, may consider NG tube instead. Current Medications: methimazole TD 2.5mg BID, mirtazapine TD SID, ondansetron 0.5mg/kg IV q 8hr

Abnormal PE/Chem/CBC/UA Results: 10/23: CBC WNL. chem 17 - gluc wnl, crea 0.5, bun 13, proteins wnl, alt 172, alpk 603, tbil 1.5, tt4 6.4, bilirubinuria. 11/5: CBC - hct 26.7 (L), MCHC 37.8 (H), RDW 27.3% (H), retic 28k, leukocytes & PLT wnl. Chem 17 - gluc wnl, crea 0.8 (wnl), BUN 15 (L), proteins wnl, alb/glob 0.7, ALT 64 (H), ALKP 1069 (H), TBIL 5.8 (H), TT4 1.4 (wnl). Urine not collected d/t peritoneal effusion. 11/8: 5am BP (single, oscillometric) 184/122 (149). 11am BP (avg, oscillometric R lat 3cm cuff L forearm): 150/113 (127), 1pm Doppler: systolic PT: aPTT: Normal 11/7: 3 view thoracic/whole body radiographs - no pulmonary nodules, cardiac silhouette appears subjectively wnl (no kidney bean shape, no backpack), no pulmonary infiltrates. Moderately gas dilated colon & cecum, loss of serosal detail.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

WEIGHT

9lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Amanda Crook

HOSPITAL NAME

River's Edge Pet
Medical Center

REFERRING VET

Dr Shelby Young

INVOICE

22891

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11/08/2025

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	0.36	1.7	0.36	40	74
FELINE CARDIAC PARAMETERS	LA/AO M-Mode	LA/AO HEART BASE (Sisson)	LAD LA MAX 4 Chamber	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	1.6	0.7-1.7	<1.6	<1.3	40-60	
PATIENT	--	1.6	1.8	1.2	1.0	NM	

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 mild enlarged left atrial size based on 2 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. Mild MR on Doppler. The left ventricular septum and free wall revealed normal thicknesses, adequate contractility and normal left ventricular volume, yet some echogenic remodeling of the septum and free wall were noted consistent with some level of myocardial fibrosis. Normal LVOT velocity was present. The left ventricular outflow tract demonstrated normal laminar flow and



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subjective structural integrity. The right atrium and auricle revealed mild increased size and normal content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated adequate linear morphology and kinetics. Mild TR present on Doppler. The right ventricle was enlarged in size with normal 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

Primary

- Unclassified cardiomyopathy - mild biatrial enlargement with normal LV thickness, mild myocardial remodeling
- Mild MR/TR

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The finding of mild biatrial enlargement in the face of normal LV wall thickness is most consistent with unclassified cardiomyopathy (UCM) and monitoring is advised. Trace MR/TR is present, which should also be monitored going forward. No additional issues are seen. Given these findings no medications are indicated with overall stable mild cardiomyopathy. The heart is not consistent with cardiogenic effusion.

Prognosis is guarded prior to assessing for progression. Patient may be risk for progression to CHF, malignant arrhythmias and/or blood clot events in the future. Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Monitor for any development of clinical signs at home, including labored breathing, cough or signs of a blood clot (paralysis, neurologic change). A recheck echocardiogram is recommended in 6 months to screen for progression.



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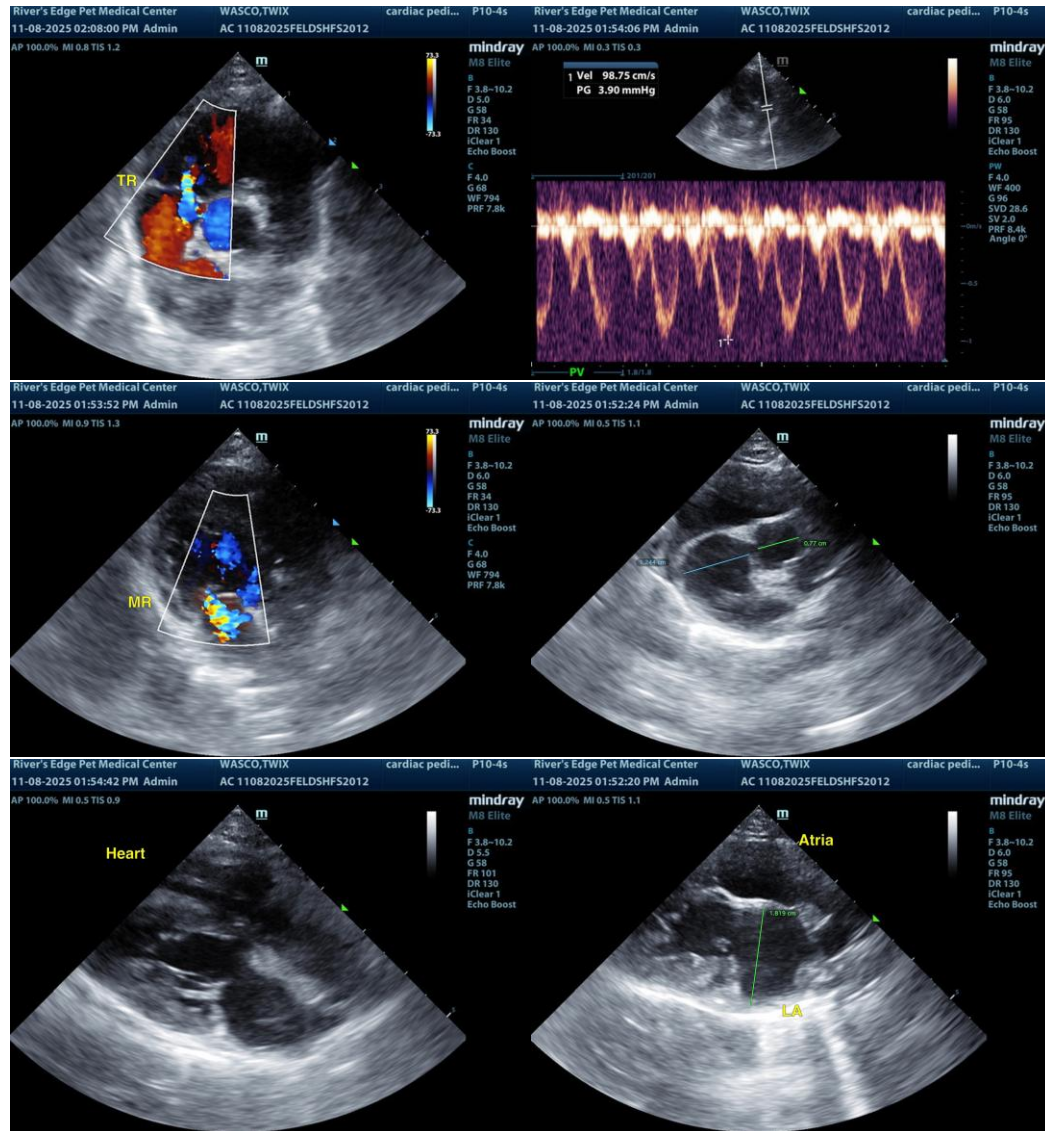
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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