



PATIENT

Sunny Runyan

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

14 years

WEIGHT

9.09lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Megan Schneck

HOSPITAL NAME

Willamette Veterinary
Hospital

REFERRING VET

Dr. Jimmerson

INVOICE

25910

DATE

8/21/22

PRESENTING CLINICAL SIGNS

History: Presented 8/20 for 1 day of vomiting with small amount of blood, anorexia and lethargy. Tachypneic. History of pica (plastic, seen carrying a Qtip around yesterday). Intermittent gallop. Grade 4/6 sternal systolic murmur.

Abnormal PE/Chem/CBC/UA Results: CXR- interstitial pulmonary pattern in caudal lung fields on VD - r/o CHF vs pneumonia vs neoplasia vs other

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension with regions of significant irregularity. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled and hyperechoic. The endocardium also appears significantly remodeled. The left atrium is severely enlarged. The right atrium is normal in size. The right ventricle appears normal. The mitral valve is normal in structure and mobility. Trace MR. No pleural or pericardial effusion seen. No obvious cardiac tumors. Arrhythmia noted throughout.

CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.1	NM	0.54	1.44	0.50	58	90
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	2.2	2.0		NM	NM	NM

**Note: All measurements based upon multi-modal images and methods. An average value is reported.*
Adapted from June Boon, Veterinary Echocardiography, 1998
Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The finding of severe left atrial enlargement in the face of normal/irregular LV wall thickness is most consistent with Unclassified or Restrictive Cardiomyopathy (RCM), however some historical infectious or inflammatory insult to the myocardium or end-stage HCM cannot be definitively ruled out. The left atrial dilation is causing insufficiency of the mitral valve. No additional issues are identified. An arrhythmia is noted throughout the study, and a baseline ECG is strongly recommended.

The finding of this degree of left atrial dilation confirms the origin of the tachypnea is likely spontaneous congestive heart failure, and lifelong medications are warranted as below. This patient is at high risk for thromboembolic events regardless of medications and this should be expressed to the owner (monitor for neurologic change, acute paralysis/lameness, etc). **Consider hospitalization for oxygen and Lasix therapy if indicated.** These findings do not clearly explain vomiting, and further evaluation may be warranted if the symptom continues. The prognosis is



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poor to grave, with a mean survival time for cats with CHF <8-12 months, however most are able to maintain a good quality of life on medications if able to be stabilized. There will always remain risk for recurrent episodes of CHF, development of blood clots, arrhythmias, and/or sudden death in the future. Monitoring of sleeping breathing rates at home is recommended as the best way to screen for recurrent CHF at home.

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Plan: Consider hospitalization, oxygen, IV diuretic in hospital until stabilized. Baseline BP/ECG. Oral medications: furosemide 1-2mg/kg PO q12h. Institute blood thinner Clopidogrel (Plavix) 75mg tablets; give ¼ tab orally once daily (NOTE: this medication is very bitter on the cut edges). Institute Pimobendan (off label use) 1.25mg PO q12h.

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Once stabilized, eating well at home and BP >130mmHg, consider addition of vasodilator ACE-I (benazepril or enalapril) 0.5mg/kg PO q12h.

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Recheck renal values in 10-14 days to ensure tolerance of medications, then every 3-4 months lifelong. A recheck echocardiogram is recommended in 4-6 months to assess for progression.

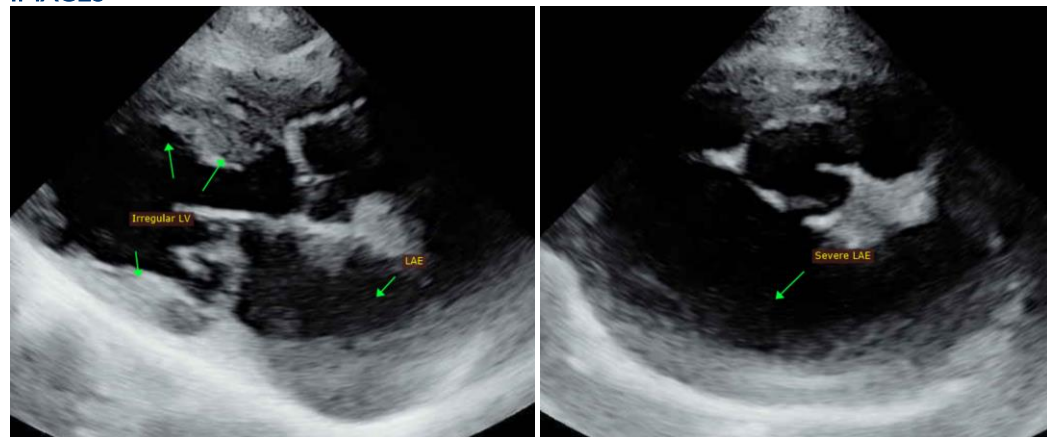
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

REFERRING VET

Dr. Jimmerson

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

INVOICE

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