



PATIENT

Riley Ottis

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

10 Years 8 Months

WEIGHT

4.8 kg

INTERPRETED BY

Sara Brethel, DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Dr. Greg Kuhlman

HOSPITAL NAME

Red River AEH & RC

REFERRING VET

Dr. Greg Kuhlman

INVOICE

36335

DATE

3/23/26

PRESENTING CLINICAL SIGNS

- Feb 2026 patient started coughing. A new II-III heart murmur is noted in pDVM notes. Thoracic radiographs were taken, radiology consult showed the heart was enlarged. Coughing has improved. She will have non-productive coughing fits about 3 times a week. She is not currently on any medications other than gabapentin for the appointment. She was also given butorphanol to collect images as she was squirmy. Blood pressure today was 136 mmHg.
- Abnormal PE/Chem/CBC/UA Results: 2/26/26 - Radiology Consult: The mild patchy infiltrate and platelike atelectasis in the right cranial and right middle lung lobes suggests mild or early chronic fibrotic atelectasis associated with lower airway inflammation and mucous plugging. This is a common sequela of lower airway inflammation, especially in feline patients. Occult feline asthma is suspected although infectious or parasitic etiologies cannot be definitively ruled out. Minimal cardiomegaly in combination with the reported heart murmur suggests mild and compensated cardiomyopathy. There is no evidence of heart failure. This patient's respiratory signs are not expected to be cardiogenic in nature. 1/6/26 - T4 WNL. Triple test negative. Chem WNL. CBC WNL

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	4.8	NM	0.48	1.2	0.45	55.83	--
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	--	1.47	1.5		~1.5	1.23	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

LVIDs: 0.53

Cardiac Presentation

The mitral valve leaflets are normal and there is no mitral regurgitation. The left atrial size is at the upper limits of normal. There is no evidence of systolic anterior motion of the mitral valve and no evidence of a left ventricular outflow tract obstruction. Left ventricular systolic and diastolic function is within normal limits. There is no evidence of left ventricular concentric hypertrophy. There is normal



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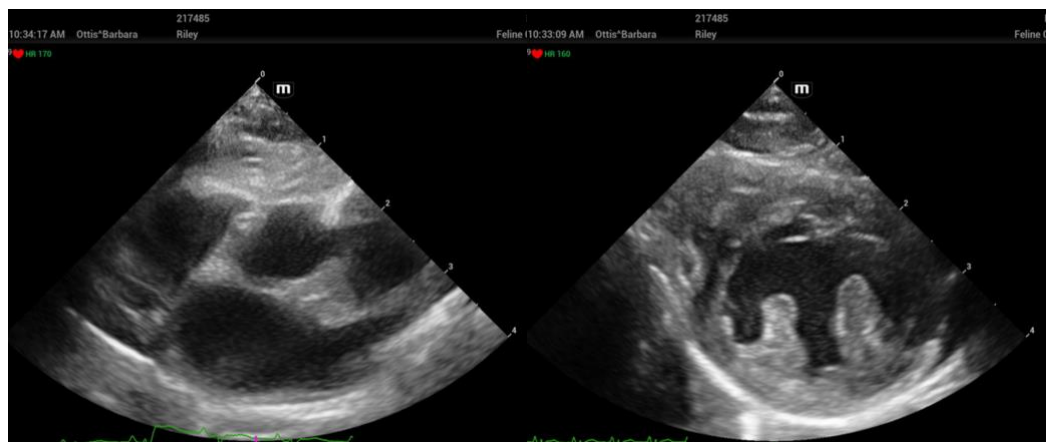
right atrial size without evidence of tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension on the images provided. The right ventricle appears normal in structure and function subjectively. The aortic and pulmonic valves have normal morphology and the corresponding outflow velocities are within normal limits. There is no evidence of pulmonic or aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

ULTRASONOGRAPHIC FINDINGS

- Structurally normal heart with the left atrium being upper limits of normal

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The heart measures within normal limits. The left atrium is at the upper limits of normal. Cardiomegaly is not identified on the images provided. Given the history of the patient's murmur, I would recommend just monitoring long term with another echocardiogram in 10-12 months, sooner if the murmur is worsening in intensity or the patient is developing cardiovascular clinical signs.



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.

Sara Brethel DVM, DACVIM (Cardiology)

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