

**PATIENT**

Ellie Crabb

**SPECIES**

Feline

**BREED**

Yorkie Mix

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

12.4 Pounds

**INTERPRETED BY**

Sara Brethel DVM,  
 DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Stewart's Mtn. View AH

**REFERRING VET**

Dr. Stewart

**INVOICE**

35076

**DATE**

12/24/25

**PRESENTING CLINICAL SIGNS**

History: P presented 12/22 for decreased appetite, hacking cough. P has history of episodic inappetence, on PE new 5/6 murmur, rdvm concerned for chordae rupture BP average 154/101 (119) Started on Furosemide 12.5mg 1 PO BID Vetmedin 2.5mg 3/4 am 1/2 pm Enalapril 2.5mg BID Abnormal PE/Chem/CBC/UA Results: ALT 367, ALKP 365, GGT 47, HCT 61.8

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
<b>NORMAL PARAMETER</b>	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
<b>PATIENT</b>	4.63	NM	--	3.16	--	68.98	--
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/)
<b>NORMAL PARAMETER</b>	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
<b>PATIENT</b>	--	1.76	3.12		1.93	1.04	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: 0.98, MR VMAX: 5.89 TR VMAX: 2.11

**Cardiac Presentation**

The mitral valve leaflets are moderately thickened with moderate mitral regurgitation posteriorly directed. There is moderate prolapse of the mitral valve leaflets. The left atrial size is moderately increased. Left ventricular internal dimensions during diastole are increased and systolic function is preserved in the face of mitral regurgitation. There is normal right atrial size with mild tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension based upon tricuspid regurgitant velocities. The right ventricle subjectively appears normal in structure and function. 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**

- Degenerative valve disease, ACVIM stage B-2
- Moderate left atrial enlargement
- Mild tricuspid regurgitation without evidence of significant pulmonary hypertension

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**



**PATIENT**

Ellie Crabb

**SPECIES**

Feline

**BREED**

Yorkie Mix

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

12.4 Pounds

**INTERPRETED BY**

Sara Brethel DVM,  
 DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Stewart's Mtn. View AH

**REFERRING VET**

Dr. Stewart

**INVOICE**

35076

**DATE**

12/24/25

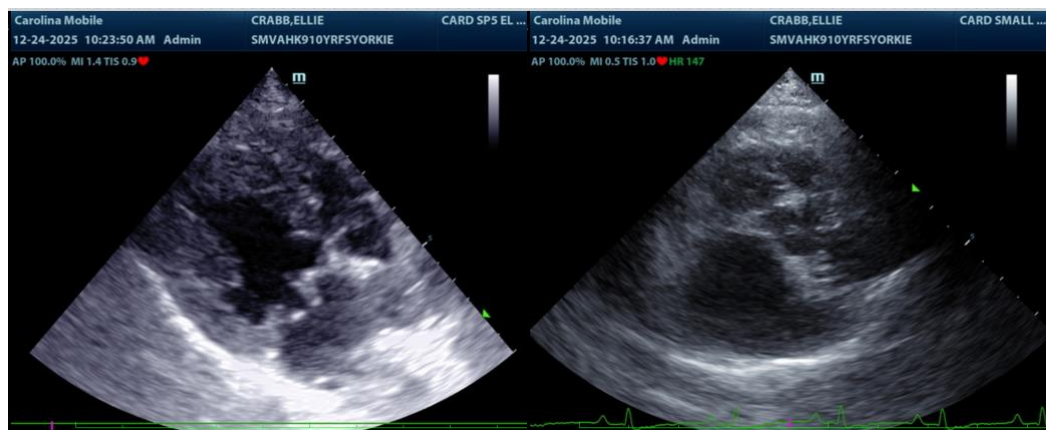
The patient has degenerative valve disease ACVIM stage B2 and pimobendan therapy at 0.27-0.32mg/kg PO q12 is recommended. This will be a lifelong therapy. A recheck echocardiogram is recommended in 4-6 months to monitor the condition since starting pimobendan. A sooner recheck is recommended if the patient develops cardiovascular clinical signs or the heart murmur is worsening in intensity. The client should start monitoring respiratory rate and effort at home if not already doing so. The resting respiratory rate should be < 35-40 breathes/minute when the patient is resting or sleeping. If the breathing rates are increasing, then chest radiographs are recommended.

Recommend obtaining a blood pressure on the patient to ensure it is <160mmHg. If the blood pressure is elevated recommend following ACVIM guidelines for systemic hypertension and treating if indicated.

With the patient's hacking cough, in the absence of changes to breathing, I do not suspect this is an episode of congestive heart failure. However, if there were respiratory changes aside from the coughing and/or radiographic evidence of cardiogenic pulmonary edema, then the patient technically would be classified as stage C, and I would recommend continued diuretic therapy.

There is no evidence of a chordal rupture on the images provided, however, there is significant billowing of the mitral valve leaflet. This is something that can occur acutely, causing a sudden change in the murmur.

I would recommend continuation of the Vetmedin and enalapril therapy, as long as the patient is tolerating it, having no signs of increased kidney values or gastrointestinal upset, this can also be continued. If after stopping diuretic therapy, the patient then does start to have respiratory changes, there would be concern for the need to restart this medication. Any time diuretics are stopped, close monitoring of breathing rates by the clients is strongly recommended. The cough is likely multifactorial and if the breathing rates remain normal, however, the patient consistently is coughing, again recommend obtaining chest radiographs, ensuring no other cause for the cough is identified. Can also consider cough suppression with hydrocodone versus Lomotil at a dose of 0.2 mg/kg twice daily.





**PATIENT**

Ellie Crabb

**SPECIES**

Feline

**BREED**

Yorkie Mix

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

12.4 Pounds

**INTERPRETED BY**

Sara Brethel DVM,  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Stewart's Mtn. View AH

**REFERRING VET**

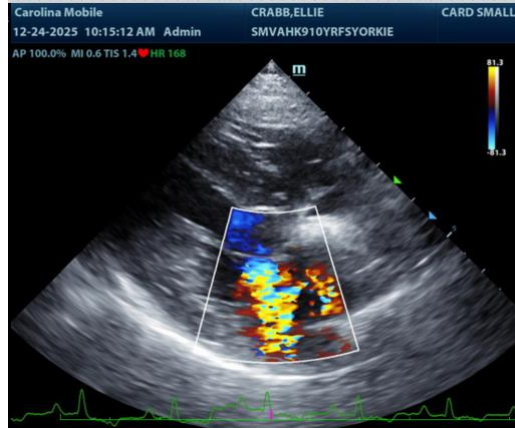
Dr. Stewart

**INVOICE**

35076

**DATE**

12/24/25



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)

[info@SonoPath.com](mailto:info@SonoPath.com)