



## PATIENT

Chloe Routhier

## SPECIES

Canine

## BREED

Poodle X

## SEX

Female Spayed

## AGE

14y

## WEIGHT

24 lbs

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Rodriguez

## HOSPITAL NAME

Foxfield VS

## REFERRING VET

Rodriguez

## INVOICE

13295

## DATE

3/18/26

## PRESENTING CLINICAL SIGNS

History:

- Chronic cough for several years. Treated with theophylline ER 75mg SID, Pimobendan 2.5mg BID. Cough has progressed. Prev echo on 1/2026: Stable compensated B2 mitral and tricuspid valve disease first dx in 2023. Please consult Sonopath radiology report from 1/13/2026. Systolic BP 165 (very stressed).

Abnormal PE/Chem/CBC/UA Results: N/A

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	5.8	3.0	--	1.5	58	89	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX 4 Chamber	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	NM	1.5	1.3	--	3.6	3.2	--

## Cardiac Presentation

The echocardiogram in this patient demonstrated mild increased **left atrial** size based on 2 different LA measurement methods with minor associated intra atrial septal deviation. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis. Doppler indicated measurable moderate eccentric MR. MR velocity measured 5.8 m/s. The **left ventricle** presented borderline to mildly increased LV dimension. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated mildly thickened with TR noted on doppler. TR velocity measured 3.0 m/s. The **right ventricle** was of normal size (1/3 diameter of LV), 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



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noted. Solitary, non-homogeneous to partial fluid/gas filled pulmonary lesion measuring ~4.5 – 5.0 cm in diameter. Subjective left lung surrounding aerated lung with mild comet tail artifact. No evidence of hepatic congestion.

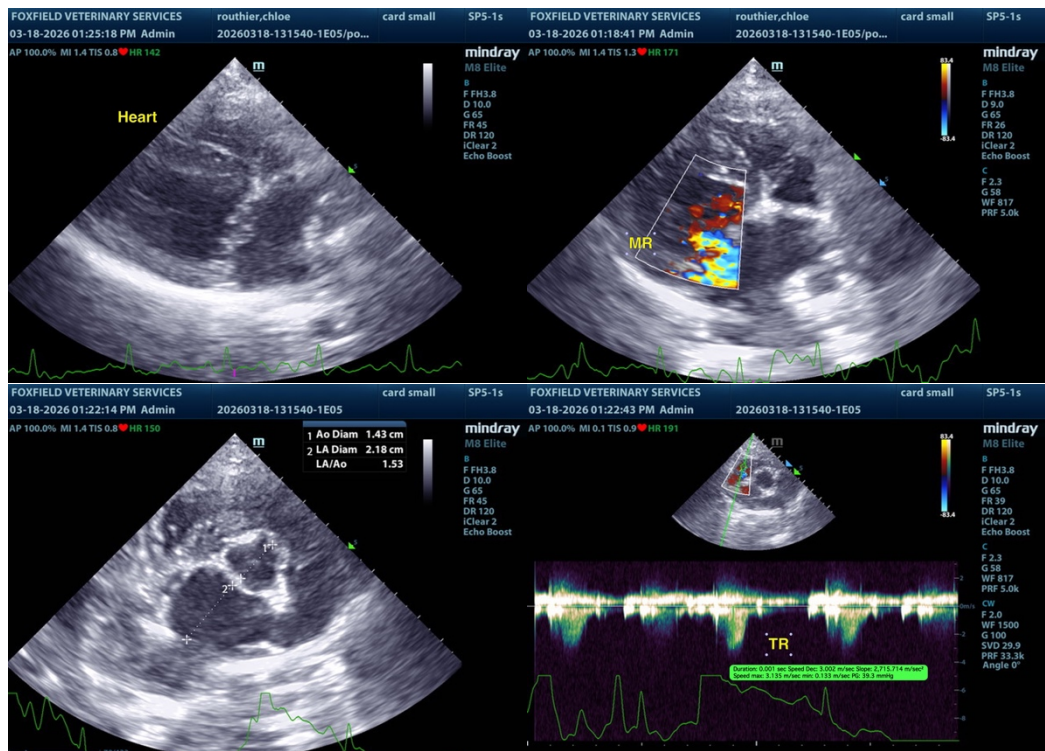
## ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (B2)
- TV insufficiency – estimated pulmonary pressure gradient suggestive of mild pulmonary hypertension
- Solitary left lung non-homogeneous partial fluid/gas filled lesion, surrounding aerated lung exhibiting mild comet tail artifact

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The lack of significant left or right heart chamber enlargement or evidence of significant pulmonary hypertension indicates the coughing in this patient is likely non-cardiogenic in origin. Given mild LA enlargement, continued Pimobendan with concurrent respiratory support and antitussive medication is warranted. Given subjective peripheral location of the lesion and assuming normal clotting status, FNA cytology, +/- fluid analysis cytology and C/S recommended for further clarification.

Recheck echo recommended in 6 months, sooner if clinical signs arise. Cardiac anesthetic risk is considered mild. If required, the following protocol is recommended with appropriate to judicious IV fluid administration. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.





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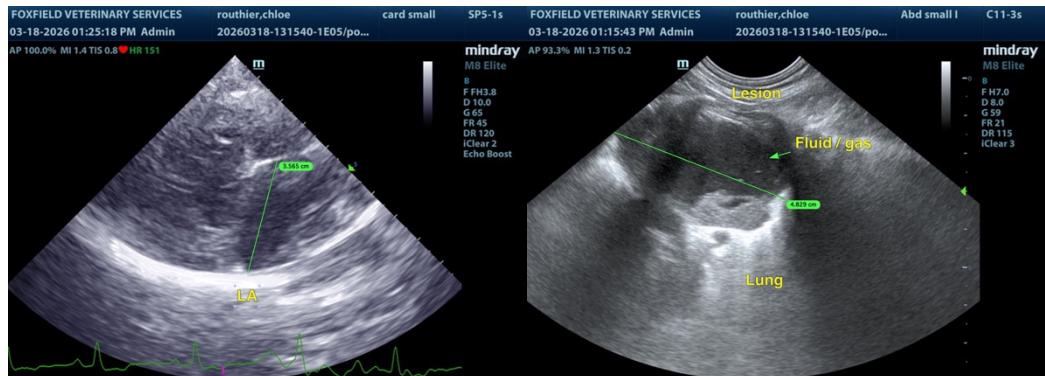
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

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