



PATIENT

Lucy Seckler

SPECIES

Canine

BREED

Cavalier King Charles
Spaniel

SEX

F/S

AGE

13 yrs

WEIGHT

23 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Martinsville VH

REFERRING VET

Dr. Shendell

INVOICE

16642

DATE

4/19/23

PRESENTING CLINICAL SIGNS

Presented 2 days ago for cough/ exercise intolerance. 6/6 L systolic murmur and crackles in caudal lung fields auscultated.

Current meds: Furosemide 25mg BID, Pimobendan 2.5mg BID (began 2 days ago)

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT	5.8	1.9	1.6	1.6	41.2	77	0.2
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
CARDIAC PARAMETERS	(BPM)	VMAX (m/s)	MAX (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	139	1.1	0.93		4.4	3.4	

Cardiac Presentation

The echocardiogram in this patient demonstrated moderately enlarged **left atrial** size based on 3 different LA measurement methods. Subtle deviation of the interatrial septum towards the right atrium, consistent with some degree of increased left atrial pressure, was present. The cranial and caudal **mitral** valve leaflets presented moderate thickening consistent with endocardiosis. Doppler indicated measurable moderate eccentric insufficiency. The **left ventricle** presented thicknesses with linear contour with mild increased LV volume. 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 mild thickening with mild TR on Doppler. 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 noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.



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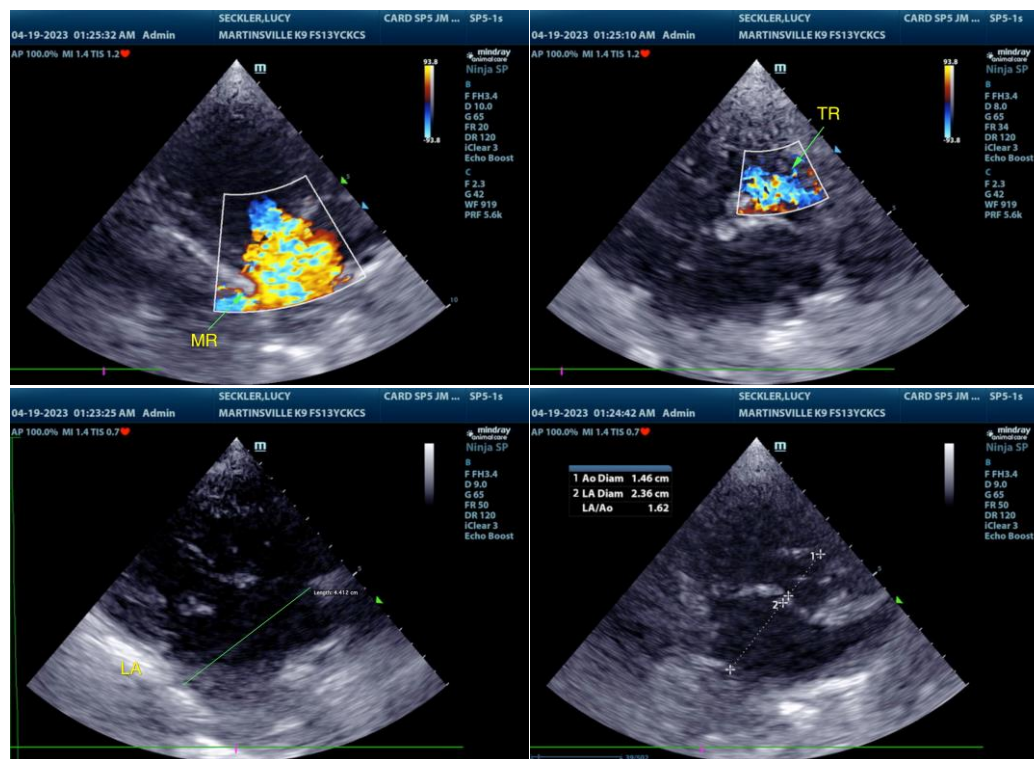
ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease - consistent with ACVIM stage B2
- Mild TR - estimated pulmonary pressure gradient not consistent with clinical pulmonary hypertension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Moderate LA enlargement combined with LV enlargement consistent with stage B2 chronic mitral valve disease. Potential for emerging stage C is possible, given the reported potential pulmonary edema on thoracic auscultation. Correlation with three-view chest radiographs is suggested. No other clinical issues such as LV systolic dysfunction or overt clinical pulmonary hypertension were noted.

Pimobendan with the lowest effective dose of Lasix and assessment of clinical and thoracic radiographic response is recommended. ACE inhibitor medication may be considered if systemic BP >130 (Not advised if <130). As-needed respiratory support and/or hydrocodone would be reasonable. Baseline monitoring of resting respiration rate going forward is advised along with monitoring of renal parameters on diuretic therapy. Prognosis is highly variable and serial sonographic monitoring is recommended. Recheck echocardiogram is suggested in 6 months, sooner if clinically indicated or progressive signs of potential CHF are noted.





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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.

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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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info@SonoPath.com

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