



PATIENT PRESENTING CLINICAL SIGNS

Bella Leone History: chronic valve disease, kidney disease currently on gabapentin, selegiline

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: RBC 5.1 (5.4-8.7), HCT 0.37 (.38-.53) HB 128 (134-207), plat 450 (143-448). USG 1.015

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Cocker Spaniel

SEX

Spayed Female

AGE

15 Years

WEIGHT

20 Lbs.

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	--	2.3	NM	1.5	32.4	50.5	0.45
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	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	BELOW	BELOW	BELOW	BELOW
PATIENT	NM	--	1.5	--	3.7	3.5	--

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Halton Peel AH

REFERRING VET

Dr. Walters

INVOICE

13056

DATE

12/14/21

Cardiac Presentation

The echocardiogram for this patient presented minor **left atrial** enlargement based on two different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis without evidence of valvular prolapse. Doppler indicated eccentric to centralized insufficiency. The **left ventricle** presented thicknesses with overall linear contour with mild increased left ventricle volume. The **myocardium** presented subtle evidence of age-related myocardial remodeling without evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was borderline subnormal yet subjectively adequate as 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 overall subjective structural integrity with mild aortic valve insufficiency present on color doppler. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. Mild tricuspid valve insufficiency present on color 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.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM early/mild B-2)



PATIENT

Bella Leone

- Mild TR - estimated pulmonary pressure gradient not consistent with clinical pulmonary hypertension
- Trace AV insufficiency

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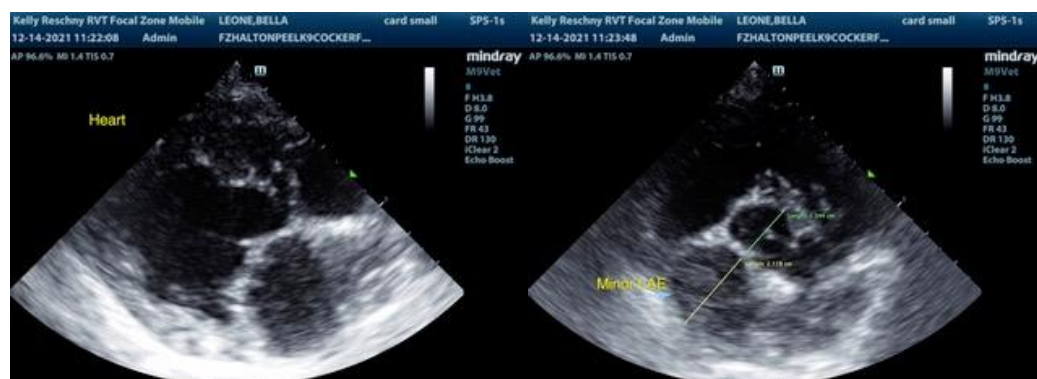
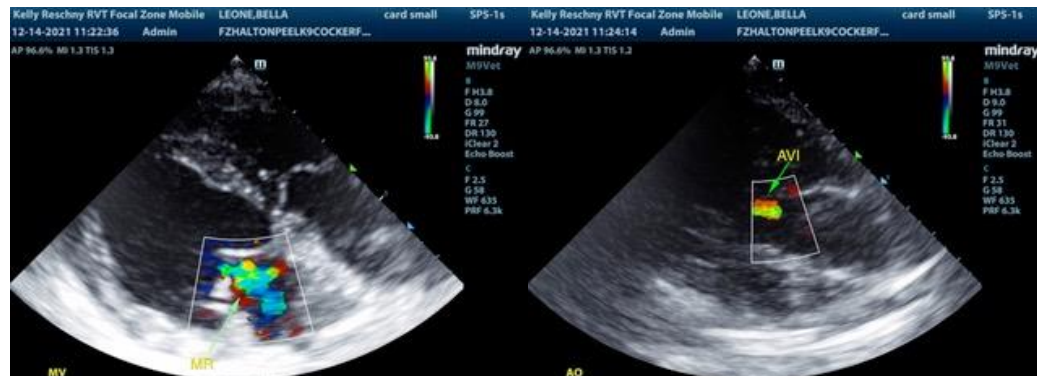
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

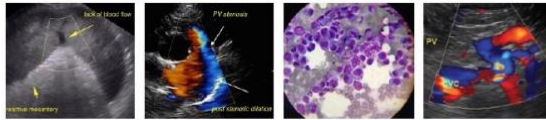
The echocardiogram is consistent with previous diagnosis of chronic degenerative valvular changes with secondary mitral valve insufficiency. Concurrent tricuspid valve and aortic valve insufficiency also present yet not considered clinically significant. The minor left atrium enlargement as well as subjective mild increased left ventricle volume indicate that the risk for future complication is mildly elevated yet overall, the heart appears to be compensated. Based on epic study criteria, this patient may be considered borderline for the use of pimobendan at this stage. Although specific cardiac medications are not typically indicated without evidence of significant left or right heart chamber enlargement and if the patient is not clinical, pimobendan at this stage could be considered as this medication may help prolong cardiac changes associated with mitral valve insufficiency. Screening blood pressure suggested given the presence of trace aortic valve insufficiency. Recheck echocardiogram suggested in 6 months or sooner if clinical signs suggestive of heart disease develop.



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.

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)



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info@SonoPath.com

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