

**PATIENT**

Max Tometich

**SPECIES**

Canine

**BREED**

Cocker Spaniel Mix

**SEX**

NM

**AGE**

9 yrs

**WEIGHT**

14kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr Sydney Schermer

**INVOICE**

14509

**DATE**

8/4/22

**PRESENTING CLINICAL SIGNS**

-possible seizure, collapse

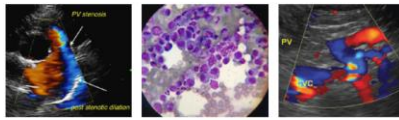
Abnormal PE/Chem/CBC/UA Results: CBC - lymphopenia Biochemistry - mild electrolyte changes, hypercholesterolemia, increased ALP (historic) Thoracic radiographs -Cardiac enlargement VHS 13.5, and increased soft tissue opacity in caudodorsal lung fields

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
<b>PATIENT</b>	5.5	3.2 MAX		2.0	33.5	62.7	0.25
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
<b>CARDIAC PARAMETERS</b>	(BPM)	<b>VMAX</b> (m/s)	<b>MAX</b> (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)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
<b>PATIENT</b>	142	1.8	1.2		4.3	4.1	

**Cardiac Presentation**

The echocardiogram in this patient demonstrated mild to moderately enlarged **left atrial** size based on 3 different LA measurement methods. Mild deviation of the interatrial septum towards the right atrium, suggestive of mild increased left atrial pressure, was present. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. No overt evidence of valvular prolapse or chordae tendinea rupture. Doppler indicated measurable moderate eccentric insufficiency. The **left ventricle** presented normal thicknesses with maintained linear contour with subjective mild increased left ventricle 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



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noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

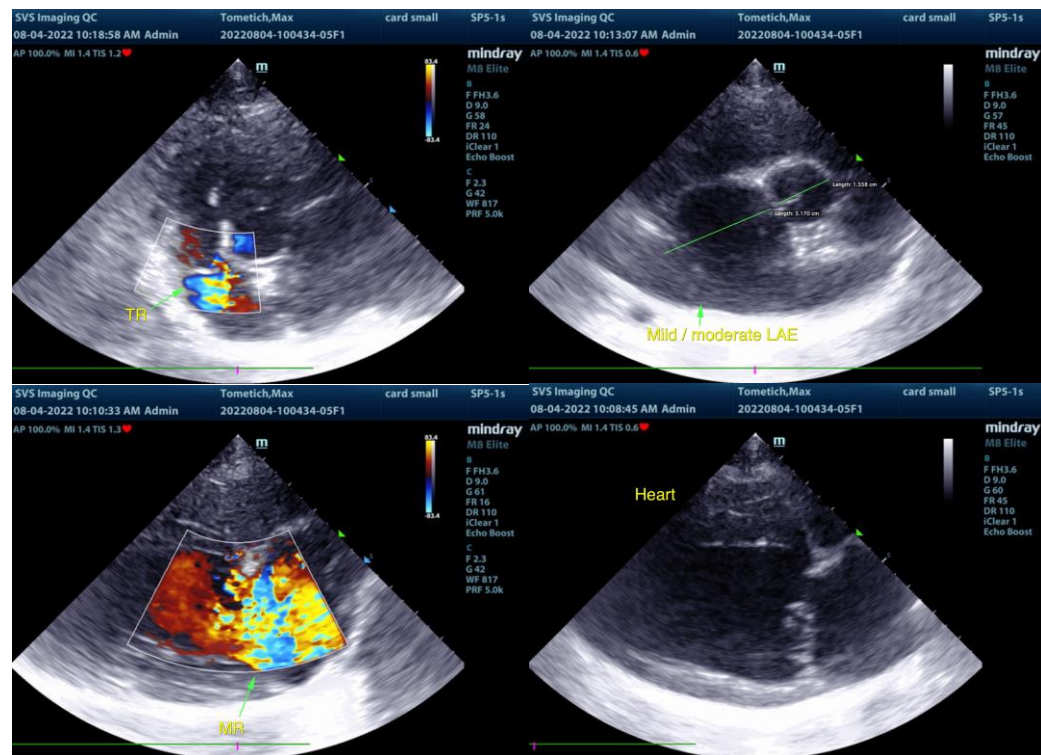
**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (ACVIM B2, potential for emerging Stage C)
- TR - estimated pulmonary pressure gradient (~42 mmHg MAX) consistent with mild pulmonary hypertension

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The mild to moderate left atrium enlargement indicates that the current and future risk going forward of complication secondary to mitral valve insufficiency is elevated. Mild pulmonary hypertension appears to be present yet the estimated pulmonary pressure gradient was not obviously consistent with significant or clinical pulmonary hypertension.

However, prognosis is highly variable, and serial sonographic monitoring along with monitoring estimated pulmonary pressure going forward is recommended. Pimobendan 0.3 mg/kg PO BID is warranted at this stage while diuretic therapy could be considered if evidence of radiographic pulmonary edema. ECG, as well as assessment of systemic BP is recommended to assess for evidence of arrhythmogenic disease or hypertension as a contributing factor to the patient's possible syncopal vs. seizure episode. Baseline monitoring of resting respiration rate is recommended. Recheck echocardiogram is suggested in 4-6 months, sooner if progressive clinical signs and / or persistent syncopal vs. seizure episodes are noted.



IMAGING PERFORMED BY

svsmobileimaging.com 309-737-3070



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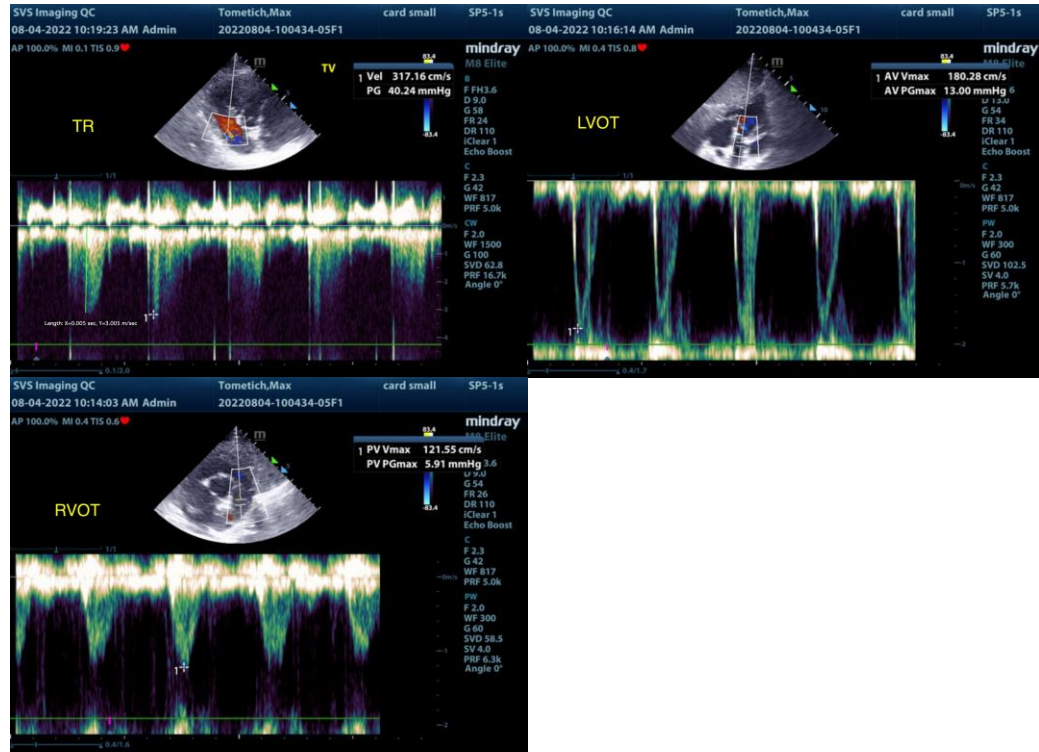
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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