



PATIENT PRESENTING CLINICAL SIGNS

Hercules Liebling History: Syncope, grade 5/6 holosystolic murmur. Current meds: Lasix 12.5 mgs 1/2 tab BID and Vetmedin 1.25 mgs BID.

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Maltese

SEX

Intact Male

AGE

11 Years

WEIGHT

10 Pounds

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	<1.3	28-40	40-100	<0.6
PATIENT	5.0	1.0	1.75	1.7	46.9	80	0.13
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				
PATIENT	98	1.1	0.81	--	3.1	2.84	--

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional VH

REFERRING VET

Dr. Aranow

INVOICE

17945

DATE

11/13/20

Cardiac Presentation

The echocardiogram for this patient presented moderately excessive **left atrial size** expressed both in the LA/AO and LA max measurements. Mild deviation of the intraatrial septum towards the right atrium, suggestive of increased left atrial pressure. The cranial and caudal **mitral** valve leaflets presented moderate thickening consistent with endocardiosis. Doppler indicated measurable moderate insufficiency. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. 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. Intermittent unclassified arrhythmia was present.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B-2, possible emerging C)



PATIENT

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- Mild TR- estimated pulmonary pressure gradient not consistent with overt clinical pulmonary hypertension
- Intermittent unclassified arrhythmia

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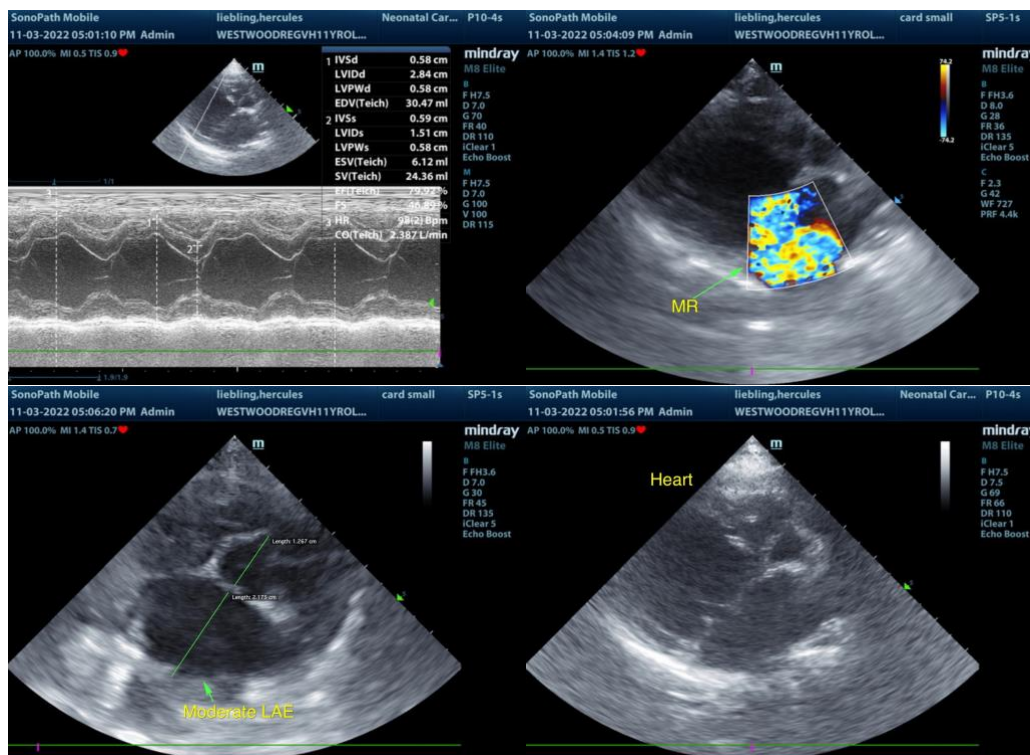
11/03/2022

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The moderate LA enlargement indicates that the current and future risk going forward of complications secondary to mitral valve insufficiency is moderately elevated. Given this presentation, current Vetmedin at 0.3 mg/kg PO BID, as well as the lowest effective dose of diuretic therapy with assessment and monitoring of BP and renal parameters going forward is recommended. Baseline monitoring of resting respiration rate is advised.

Given no obvious evidence of clinical pulmonary hypertension, the syncope in this patient may be somewhat secondary to unclassified arrhythmia. ECG assessment for further clarification is recommended.

Prognosis at this stage is highly variable and serial sonographic monitoring is recommended. Recheck echocardiogram is suggested in 4-6 months or sooner if progressive clinical signs of heart disease or increased episodes of syncope are noted.



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.



PATIENT

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