



PATIENT

Jack VanHeumen

SPECIES

Canine

BREED

Maltese

SEX

Male Neutered

AGE

13 yo

WEIGHT

12.5 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Elaina Petrone

HOSPITAL NAME

Long Branch AH

REFERRING VET

14691

INVOICE

14691

DATE

8/24/22

PRESENTING CLINICAL SIGNS

-13 yo MN Maltese, Previous echo Stage B1, MVR, normal LA:Ao (report from sonopath), on Pimobendan 1.25mg PO Q12; LA significantly. more enlarged now, echo prior to mass removal

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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				1.75	50	83	0.2
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	NM				3.0	2.6	

Cardiac Presentation

The echocardiogram in this patient demonstrated mildly enlarged **left atrial** size based on 3 different LA measurement methods. Subtle deviation of the interatrial septum towards the right atrium, suggestive of minor increased left atrial pressure, was present. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated eccentric 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 adequate linear morphology. 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 mild B2)



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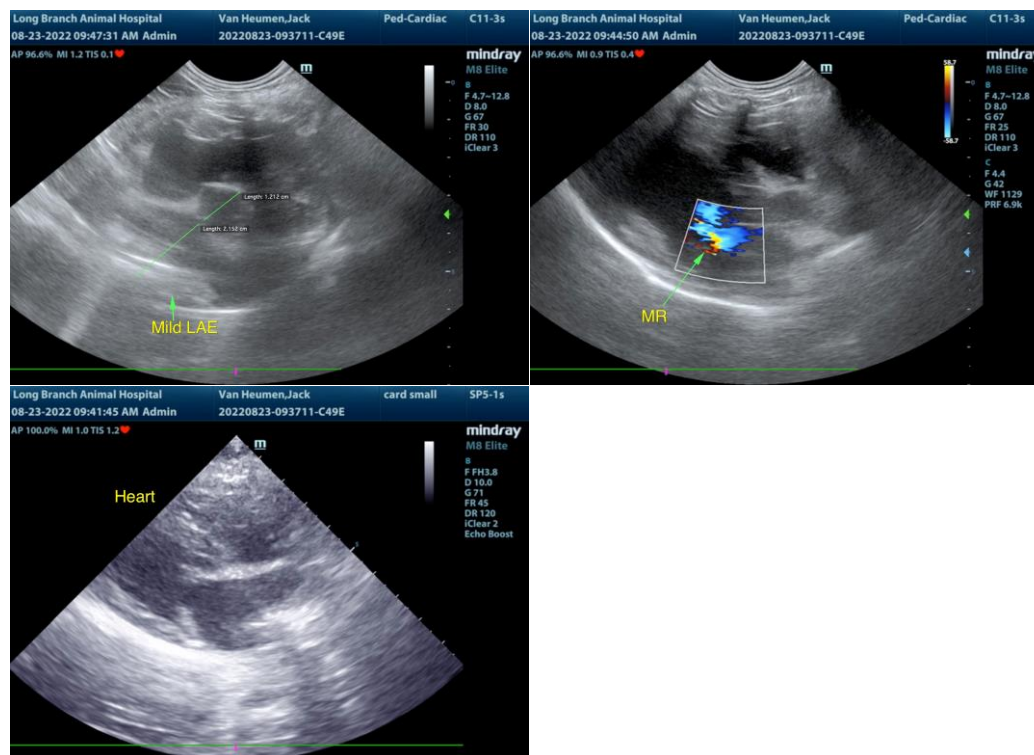
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The echocardiogram reveals evidence of mild progressive left atrium enlargement without evidence of concurrent left ventricle increased volume. Overall, the heart appears to be compensated without evidence of additional clinical issues such as LV systolic dysfunction or evidence of clinical pulmonary hypertension. The mild progressive left atrium enlargement was not overtly consistent with congestive criteria.

Pimobendan 0.3 mg/kg PO BID is warranted, given the evidence of mild progressive LA enlargement, as this medication may help prolong cardiac changes associated with mitral valve Insufficiency. Diuretic therapy is not overtly indicated unless evidence of increased resting respiration rate or radiographic pulmonary edema. Likewise, ACE inhibitor medication is not suggested unless evidence of hypertension is present (BP > 130, not advised if BP < 130).

Prognosis at this stage is highly variable and serial sonographic monitoring is required for further assessment. No overt anesthetic contraindications, given this presentation. The following anesthetic protocol is recommended. Baseline monitoring of resting respiration rate and recheck echocardiogram is suggested in 6 months, sooner if clinical signs arise.

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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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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