


PATIENT

"Keutsooni" Jung

PRESENTING CLINICAL SIGNS

Patient presents for cough/hack; worse at night. Rads at RDVM showed a plump cardiac silhouette, prominent vessels and bronchi. Possible grade 1/6 L sided murmur.

SPECIES

Canine

Current meds: Clavamox drops, theophylline suspension; starting hydrocodone.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART
BREED

Maltese

SEX

FS

AGE

10.5yr

WEIGHT

4.2lb

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	5.7		1.7	2.0	35	67	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	145	1.3	0.8		2.7	2.2	

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

 Westwood Regional
 Vet Hospital

REFERRING VET

Dr. Hartwick

INVOICE

14146ag

DATE

06/19/2023

Cardiac Presentation

The echocardiogram in this patient demonstrated moderate increased left atrial size based on 3 different LA measurement methods. Subtle deviation of the interatrial septum towards the right atrium suggestive of mild increased left atrial pressure was noted. The cranial and caudal mitral valve leaflets presented moderate (anterior > posterior) thickening consistent with endocardiosis. Mitral valve leaflet prolapse was present. Doppler indicated measurable moderate eccentric insufficiency. The left ventricle presented thicknesses with linear contour and increased LV dimension. 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. No overt arrhythmia or evidence of hepatic congestion of brief cranial abdominal sonographic assessment.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B2) with MV prolapse.



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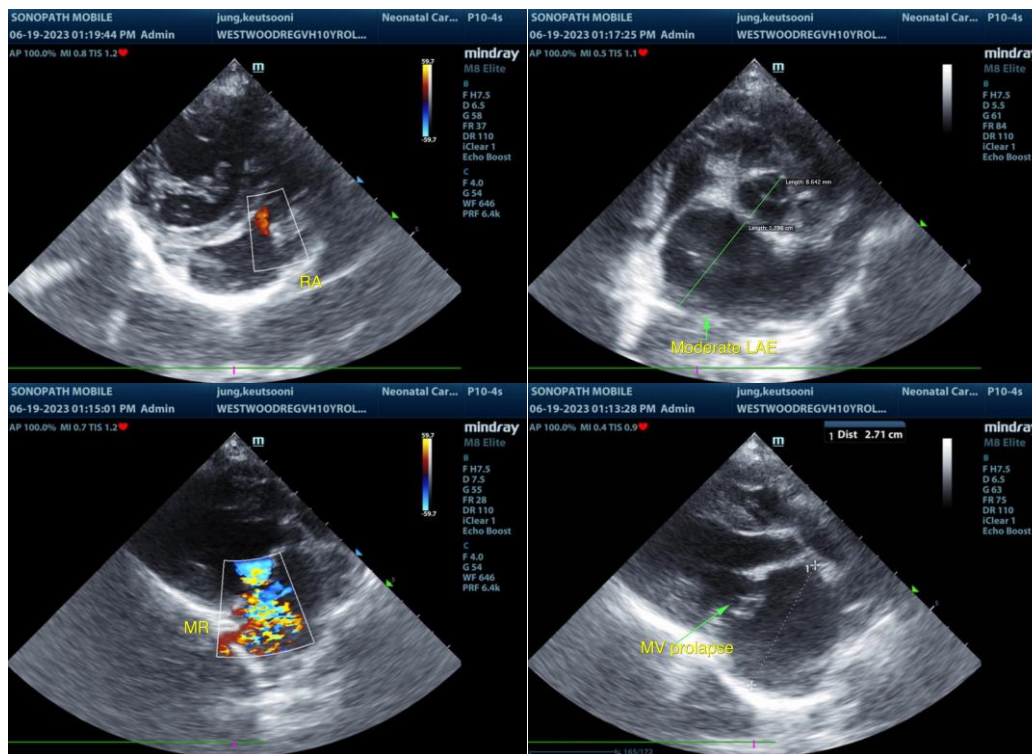
06/19/2023

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency. The degree of left atrial enlargement implies that the risk of complication secondary to mitral valve insufficiency is at least moderately elevated. No additional issues such as LV systolic dysfunction or overt clinical pulmonary hypertension. The degree of LA/LV enlargement is not overtly consistent with definitive left heart congestive criteria indicating potential multifactorial component to the patient's respiratory signs. Concurrent lower airway disease may be considered.

Pimobendan 0.3 mg/kg PO BID with as needed respiratory support including as needed anti-tussive medication is recommended. Monitoring of resting RR is advised. Diuretic trial at lowest effective dose may be considered if evidence of increased resting RR or concern of radiographic pulmonary edema.

Prognosis at this stage is variable and serial sonographic monitoring is recommended with a recheck echocardiogram in 6 months, sooner if clinical signs suggestive of left sided congestion are noted.



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.

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