

PATIENT

Ben Pagan

PRESENTING CLINICAL SIGNS

History: on going cough, since last week Exam findings and abnormal lab values: Grade 3/6 murmur
Question you want answered with an ultrasound: evaluate the heart enlargement and murmur

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Chihuahua

SEX

MN

AGE

12 years

WEIGHT

10.3 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	<1.3	28-40	40-100	<0.6
PATIENT	NM	2.8	NM	1.5	50	83.3	0.32
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	123	1.0	0.75		2.6	2.43	NM

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Gromalak

HOSPITAL NAME

SVS Imaging

REFERRING VET

Dr. Schnuelle

Cardiac Presentation

The echocardiogram for this patient presented excessive left atrial size expressed both in the LA/AO and LA max measurements. Very subtle deviation of the intra atrial septum towards the right atrium was observed which may suggest minor increased LA pressure. The cranial and caudal mitral valve leaflets presented mild vegetative thickening consistent with endocardiosis. Doppler indicated eccentric insufficiency. The left ventricle presented thicknesses with linear contour and minor increased LV 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 adequate linear morphology. Minor TR present 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

INVOICE

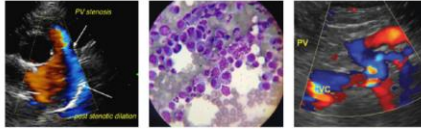
10468ag

DATE

4/27/22

ULTRASONOGRAPHIC FINDINGS

- Compensated chronic mitral valve disease (ACVIM early B2)
- Minor TR

IMAGING PERFORMED BYSVS Mobile Imaging 262-366-5970
fredgromalak@gmail.com**Clinical Sonography & Telemetry**

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

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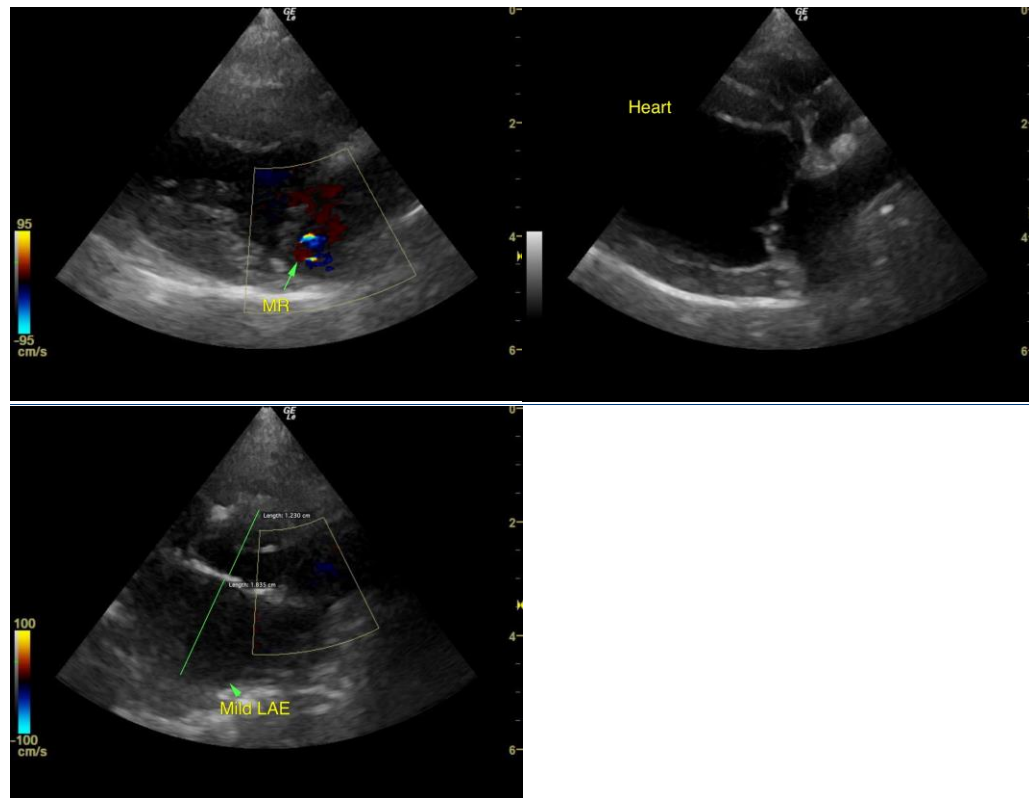
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4/27/22**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cause of the murmur is most consistent with mild chronic degenerative valvular changes with secondary mitral valve insufficiency. The minor to mild LA enlargement suggests that the current risk of complication is mildly elevated yet overall, at this stage the heart appears to be compensated. No other clinical issues such as LV systolic dysfunction or evidence of clinical pulmonary hypertension were noted. The ongoing cough in this patient is most likely non cardiogenic in origin. Consideration for primary lower airway disease may be indicated. In cases of mitral valve insufficiency without evidence of cardiac changes, medications are not overtly indicated however, Pimobendan 0.3 mg/kg PO BID could be considered at this stage given the minor LA and LV changes. Serial sonographic monitoring is required for further prognosis. Recheck echocardiogram suggested in 6 months, sooner if clinical signs consistent with heart disease arise.



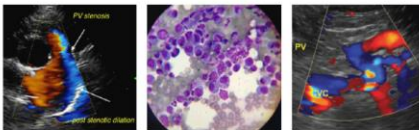
The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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