


PATIENT PRESENTING CLINICAL SIGNS

Bodie Burt History: III/VI heart murmur; hacking dry cough progressing over the past few months Current meds: Gabapentin and Galliprant (arthritis)

SPECIES Abnormal PE/Chem/CBC/UA Results: ALP 213, ALT 222

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART
BREED

Chihuahua Mix

SEX

Neutered male

AGE

13 years

WEIGHT

30.5 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY
Jessica Miller

HOSPITAL NAME

Westwood Regional
Veterinary Hospital

REFERRING VET

Dr. Giammanco

INVOICE

10162ag

DATE

03/14/2022

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	<1.6	28-40	40-100	<0.6
PATIENT	5.9	1.3	1.1	1.32	50	82.7	0.1
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	BELOW	BELOW	BELOW	BELOW
PATIENT	116	1.6	1.0		2.5	3.0	NM

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal mitral valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable 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 and minor TR. 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.



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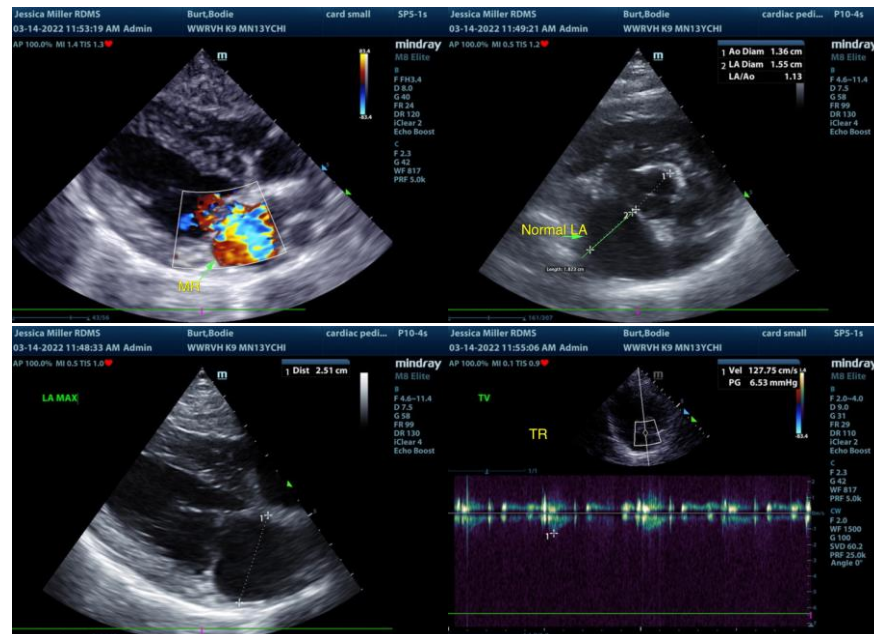
ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B1).
- Minor TR-estimated pulmonary pressure gradient not consistent with clinical pulmonary hypertension.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is secondary to chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency. The lack of left atrium enlargement indicates that the hemodynamic effects of the mitral valve insufficiency are mild and the risk of current and future complication is low. No other clinical issues such as systolic dysfunction or evidence of clinical pulmonary hypertension were present. Given this presentation the coughing in this patient appears to be non-cardiogenic in origin.

Primary lower airway disease as a cause of the cough may be considered. No overt indication for cardiac medications at this stage. Continued conservative monitoring of the murmur is recommend at this stage although serial sonographic monitoring is required for further prognosis. Recheck echocardiogram is suggested in 6 months and 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



PATIENT

can be of any further assistance please contact me.

Bodie Burt

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info@SonoPath.com

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