



PATIENT

Isabel Simpson

SPECIES

Canine

BREED

Chihuahua

SEX

Spayed Female

AGE

14

WEIGHT

5.2 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

Signal Hill AH

REFERRING VET

Dr. Lebouldus

INVOICE

13132

DATE

1/20/22

PRESENTING CLINICAL SIGNS

Enlargement of cardiac silhouette non clinical for heart disease attending would like to start on pimobendane. History of cholangitis and vacuolated hepatopathy . Enlarged liver on Ab x ray
Abnormal PE/Chem/CBC/UA Results: Non recent

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	<1.6	28-40	40-100	<0.6
PATIENT	6.0	<2.0	1.3	1.5	60	91.1	0.18
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	169	1.2	1.0		2.7	2.4	

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. 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

Primary Findings

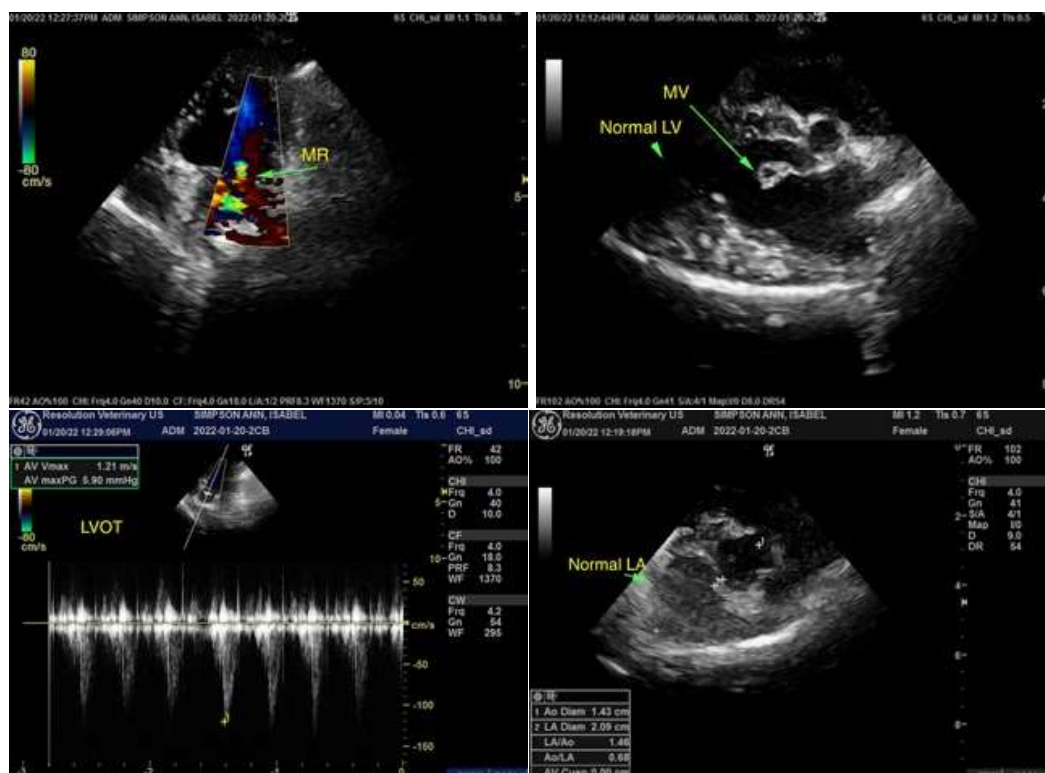
- Chronic mitral valve (ACVIM B1)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is secondary to chronic degenerative valvular changes and eccentric mitral valve insufficiency. The lack of significant left atrium enlargement indicated that the relative risk of complication owing to mitral valve insufficiency is relatively low, yet prognosis at this stage is highly variable.

In a nonclinical patient without evidence of significant cardiac changes, medications are not specifically indicated. Conservative monitoring at this stage would be appropriate. Serial echocardiographic monitoring is recommended for further prognosis with initial recheck in 6 months, sooner if clinical signs suggestive of heart disease arise. No anesthetic contraindications if required. Screening BP suggested given borderline elevated MR velocity.

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.

BREED

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info@SonoPath.com

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