



PATIENT

Annie Bennett

SPECIES

Canine

BREED

Chihuahua

SEX

FS

AGE

11 years

WEIGHT

8 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dave Stasiuk RDMS,
RDCE

HOSPITAL NAME

Silverado Veterinary
Clinic

REFERRING VET

Dr. K.D. Marahar

INVOICE

14822

DATE

9/6/22

PRESENTING CLINICAL SIGNS

Muffled sounds on auscultation. No discrete murmur.

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				1.38	50	85	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	BELOW	BELOW	BELOW	BELOW
PATIENT	NM	1.0	1.5		2.1	2.0	

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 mild vegetative thickening consistent with mild endocardiosis. Doppler indicated minor subjective 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

- Overtly normal cardiac structure and function
- Mildly thickened mitral valve leaflets - consistent with mild endocardiosis
- Mild MR



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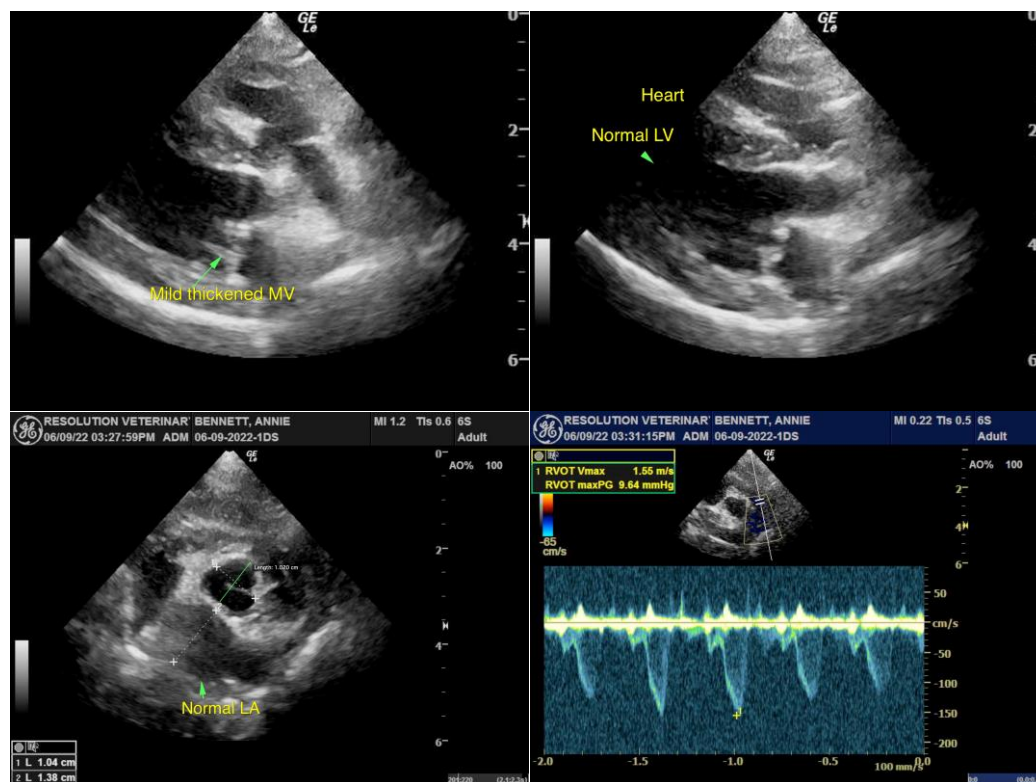
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall cardiac presentation is consistent with mild chronic degenerative valvular changes with mild mitral valve insufficiency. The mild mitral valve insufficiency may not be audible at this stage. Regardless, the hemodynamic effects of the MR are minimal, given the lack of left atrium enlargement. No evidence of pericardial disease i.e., pericardial effusion. No indication for cardiac medications is evident.

Monitoring for the development of an audible murmur going forward would be reasonable. Recheck echocardiogram in 6-12 months is recommended, sooner if clinical signs suggestive of heart disease arise or if an audible to progressive murmur is detected.



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com