



PATIENT

Sansa Thompson

SPECIES

Canine

BREED

Mix

SEX

SF

AGE

10

WEIGHT

67

INTERPRETED BY

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

IMAGING PERFORMED BY

Tasha

HOSPITAL NAME

Dillsburg VC

REFERRING VET

Dr. Crow

INVOICE

14116

DATE

6/16/22

PRESENTING CLINICAL SIGNS

-Newly acquired heart murmur 2/5 left sternal; Non symptomatic.
Abnormal PE/Chem/CBC/UA Results: WNL

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT				1.1	41.2	75.4	0.2
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
CARDIAC PARAMETERS	(BPM)	VMAX (m/s)	MAX (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	NM	NM	NM		3.4	3.4	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. 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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** 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. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Sonographically normal cardiac structure and function without a definitive cause of the murmur identified.

Assuming no evidence of volume changes such as dehydration or anemia, a benign physiological / flow murmur may be considered, although a small non-visualized flow abnormality or valvular insufficiency could also be present.

Regardless, the normal cardiac structure and function indicate that the hemodynamic effects of the murmur are low. Without evidence of left or right heart chamber enlargement or additional clinical issues such as LV systolic dysfunction, complication secondary to the low-grade murmur is also considered low. No indication for cardiac medications at this stage. Serial sonographic monitoring is required for further prognosis. However, conservative monitoring of the murmur would be appropriate with recheck echocardiogram suggested in 6-12 months, sooner if clinical signs consistent with heart disease arise or if murmur intensity progresses.



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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