

**PATIENT PRESENTING CLINICAL SIGNS**

Mimic Corbin Possible new heart murmur found on most recent exam. Not clinical, no cough. Is able to play hard with the other dog without issue, but sleeps soundly afterwards. Grade 2-3/6 left sided heart murmur. No current meds.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Swedish Valhound

**SEX**

Intact Female

**AGE**

13 Months

**WEIGHT**

23 Pounds

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			1.2	1.05	22	46	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				
PATIENT		1.8	1.34		3.2	2.6	

**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**

- Normal echocardiogram, likely flow murmur

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Flow murmurs can be caused by volume shifts, anemia, excitable/tachycardic state, DRVOTO (Dynamic Right Ventricular Outflow Obstruction), or even simple stethoscope pressure upon clinical exam. These flow murmurs are typically benign and may develop often later in life theoretically owing to age related clinically insignificant changes of the heart. If the patient is recently clinical for anorexia, weight loss or

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**HOSPITAL NAME**

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**REFERRING VET**

Dr. Kazienko

**INVOICE**

33822

**DATE**

12/29/21



**PATIENT**

Mimic Corbin

metabolic disturbances, an abdominal sonogram and full workup may be appropriate to assess underlying clinical systemic causes of a newly developed flow murmur.

**SPECIES**

Canine

Laminar flow was found in all valvular structures. The cause of the murmur is unclear, likely owing to volume shifts and is idiopathic. No structural, congenital or functional issues are present. If the murmur is still present in a year, then recheck echocardiogram at that time. However, this is not likely to be a clinical issue for this patient.

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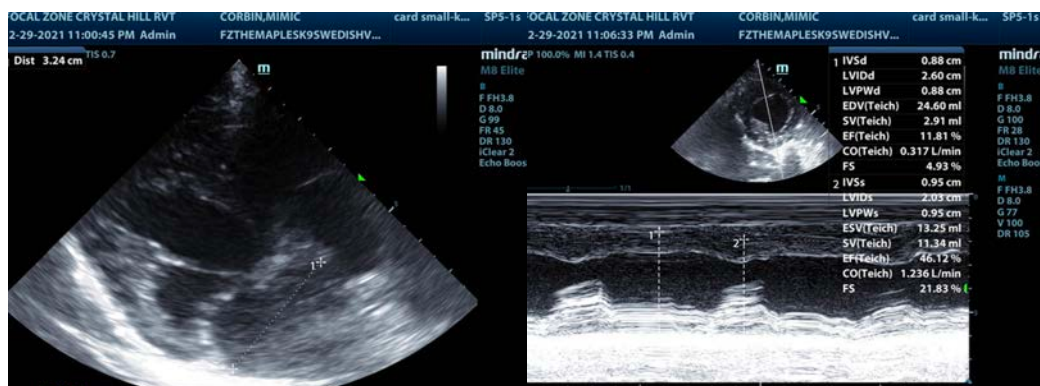
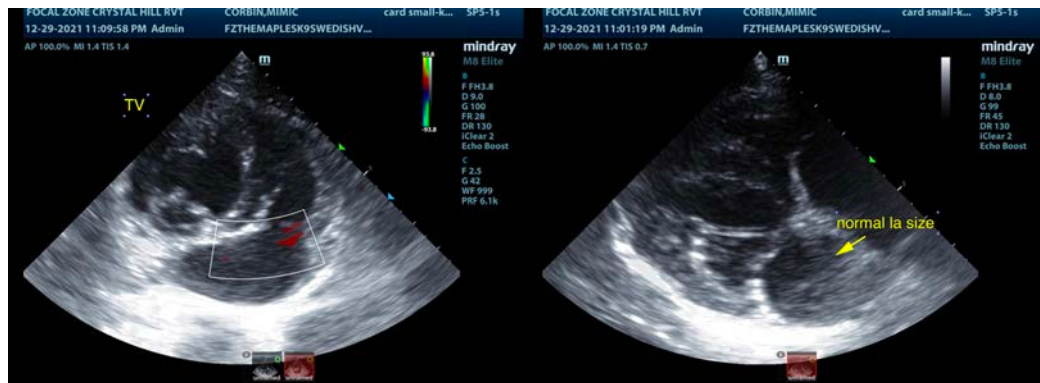
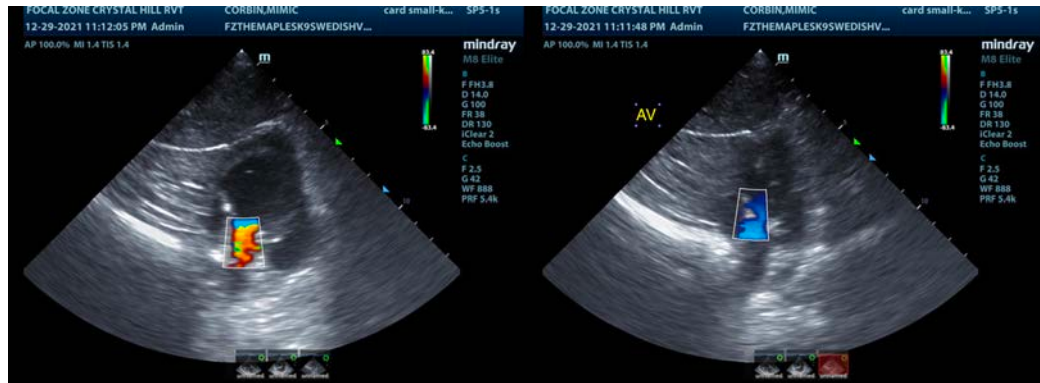
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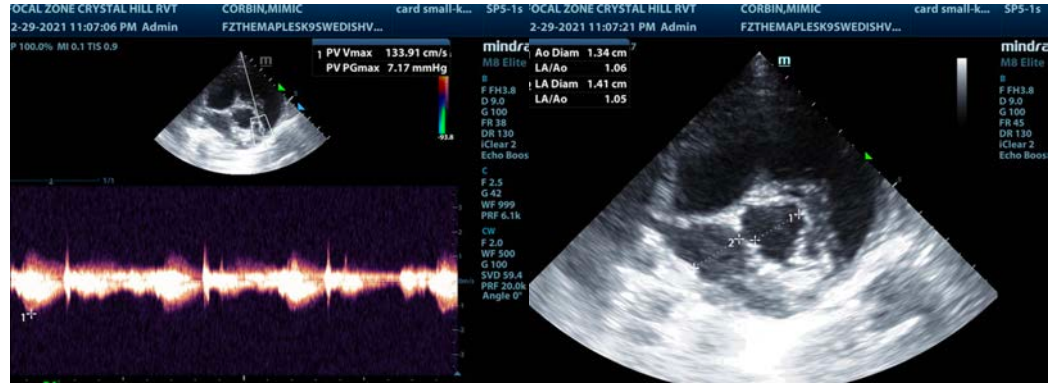




**PATIENT**  
Mimic Corbin

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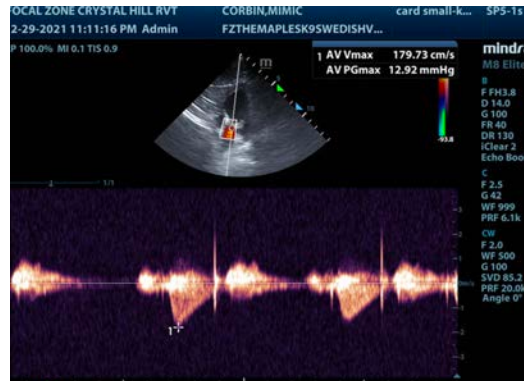
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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