

**PATIENT**

Renny Henrick

**SPECIES**

Canine

**BREED**

German Shepherd

**SEX**

Intact Female

**AGE**

9 Weeks

**WEIGHT**

15 Pounds

**INTERPRETED BY**

Sara Brethel, DVM,  
 DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Scotts Creek AH

**REFERRING VET**

Dr. Rendazzo

**INVOICE**

36213

**DATE**

3/13/26

**PRESENTING CLINICAL SIGNS**

- P presented for echo due to 2/6 murmur on puppy exams.
- P very sweet but wiggly needed Torb for echo

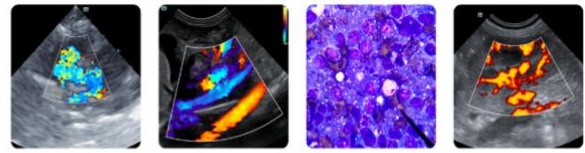
**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
<b>PATIENT</b>	Underest	--	1.18	1.32	51.27	--	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX 4 Chamber	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6				
<b>PATIENT</b>	154	4.0	0.63	6.82	--	2.36	1.15

**Cardiac Presentation**

The mitral valve leaflets are mildly thickened and there is mild to moderate eccentric mitral regurgitation. There is no prolapse of mitral valve leaflets. There does appear to be systolic anterior motion of the mitral valve. Left atrial size is normal. Left ventricular dimensions are within normal limits and left ventricular systolic function is preserved in the face of mitral regurgitation. There appears to be an outflow tract obstruction within the left ventricular outflow tract (moderate obstruction). An associated tissue ridge within the left ventricle is not identified. Portions of the left ventricular myocardium appear hyperechoic. There is no evidence of left ventricular concentric hypertrophy. The right atrium is normal. There's no evidence of tricuspid regurgitation, and no evidence of pulmonary hypertension on the images provided. Subjectively, the right ventricle appears normal in structure and function. The aortic valve appears tri-leaflet and there is no aortic insufficiency. Pulmonic valves have normal morphology and corresponding outflow velocities are normal. The aorta does not appear to have a post-stenotic dilation. The pulmonary artery and associated branches are normal. No evidence of pleural effusion, pericardial effusion, or intracardiac masses.

**ULTRASONOGRAPHIC FINDINGS**



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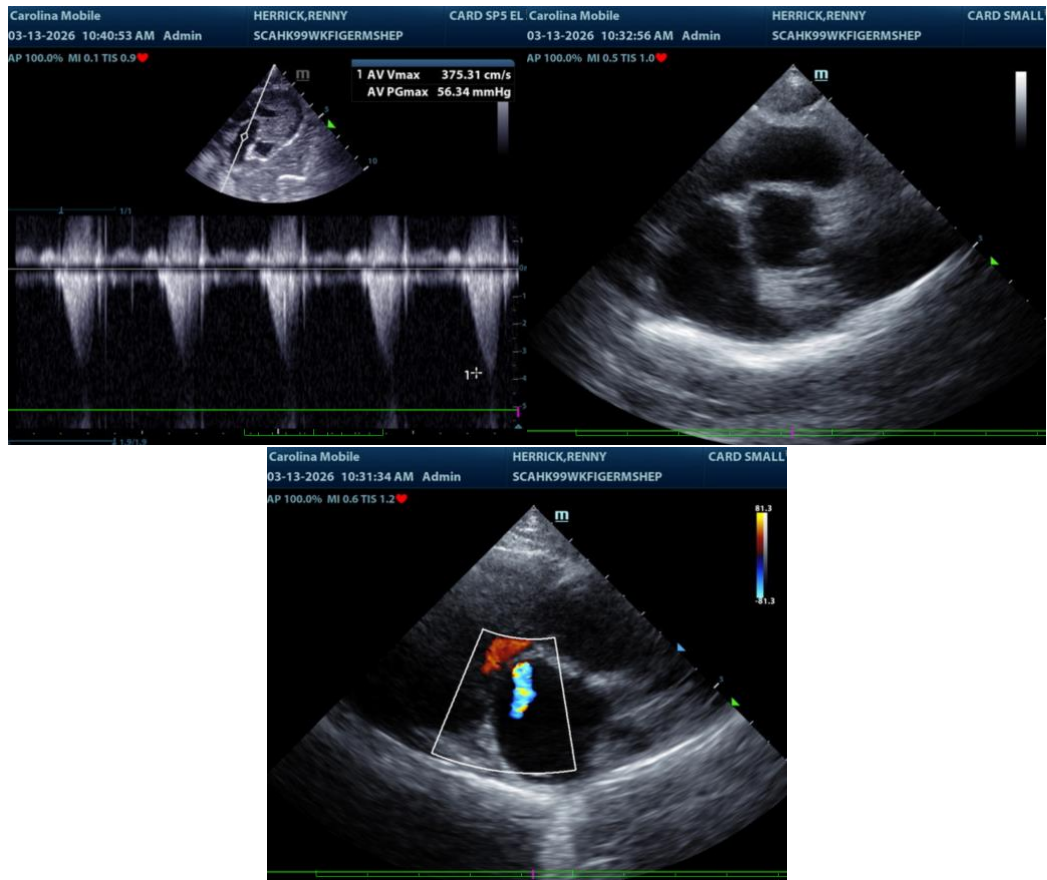
**DATE**

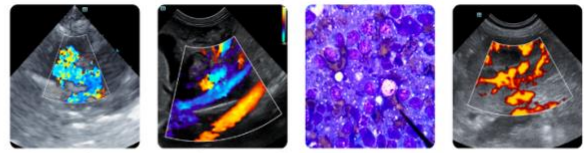
3/13/26

- Thickening of the mitral valve
- Systolic anterior motion of the mitral valve
- Left ventricular outflow tract obstruction, moderate
- Normal left atrial size

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The patient has systolic anterior motion of the mitral valve, thickening of the mitral valve, and a left ventricular outflow tract obstruction that is moderate. Differentials include mitral valve dysplasia with a component of systolic anterior motion causing the left ventricular outflow tract obstruction or mitral valve dysplasia with a component of aortic versus subaortic stenosis. Given the moderate category and the absence of clinical signs, no therapies are recommended, but I do recommend a recheck echo in 4-6 months. You can consider a referral due to the congenital nature of the condition and likely long-term follow-up is required for this patient. Medications may be needed in the future. If the patient requires anesthesia clearance. Recommend giving antibiotics 3-5 days prior, during, and 3-5 days post (broad spectrum such as clavimox versus cephalexin) should be tolerated. This is due to the increased potential for endocarditis given the turbulence within the left ventricular outflow tract. It is unknown how this is going to affect the patient long-term. Conditions such as subaortic stenosis are unique in that they do not declare their long-term severity until the patients are full-grown.





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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.**

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.

Sara Brethel DVM, DACVIM (Cardiology)

[info@SonoPath.com](mailto:info@SonoPath.com)