



**PATIENT**

Rogue Orr

**SPECIES**

Canine

**BREED**

American Bulldog Mix

**SEX**

Male

**AGE**

8 weeks

**PRESENTING CLINICAL SIGNS**

History: Just obtained; apparently no murmur heard at 1st vaccines with breeder but has a grade 4 to 5/6 systolic left and right apical, moderately radiating murmur. No exercise intolerance, no coughing -Abnormal PE/Chem/CBC/UA Results: Growing well; MM pink, hind toe color normal, Heart murmur as above. Systolic BP between 105 and 80mmHg. Sedated with 0.2 mg/kg torb for exam.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Mild elongation and thickening of the anterior mitral valve leaflet with no prolapse into the left atrial lumen. No obvious mitral regurgitation visualized with no left atrial dilatation. Normal LV diameter with adequate myocardial function. Suspect early LV hypertrophy (0.7cm globally). The tricuspid valve appears normal with no tricuspid regurgitation. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. No obvious aortic or pulmonic insufficiency. The tip of the mitral valve is suspected to prolapse into the LVOT; however, this is not definitive. No pericardial or pleural effusion noted. No obvious cardiac masses. No congenital shunts visualized.

**CARDIAC CHART**

**WEIGHT**

4.8kgs

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Nigel Gumley, DVM

**HOSPITAL NAME**

Cedarview Animal Hospital

**REFERRING VET**

Dr. Gumley

**INVOICE**

21356

**DATE**

10/5/21

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
<b>PATIENT</b>	NA	NA	1.1	1.3	44	80	NM
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)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
<b>PATIENT</b>	NM	1.6	1.2	4.8	1.5	1.8	1.0
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The suspect cause of the murmur is mitral valve dysplasia causing an LVOTO. This is considered suspect as color flow and spectral imaging are not definitive. Early LV hypertrophy is noted which would support the diagnosis. No additional issues are identified, such as congenital shunts. It is



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important to note that ultrasound is not entirely sensitive for small abnormalities, especially in juvenile animals. Advanced imaging may be indicated.

**SPECIES**

Canine

Given the very young age of the patient and mild nature of the findings, no cardiac medications are indicated at this time. Assuming mitral valve dysplasia is confirmed, Atenolol may be suggested in the future depending on clinical progression as the puppy ages. Prognosis is guarded pending monitoring for progression.

**BREED**

American Bulldog Mix

Monitor for development of associated clinical signs including cough, labored breathing, exercise intolerance or collapse episodes.

**SEX**

Male

**PLAN**

Consider referral to confirm the diagnosis, either now or once the puppy is 4 months of age with a follow up echocardiogram once full stature.

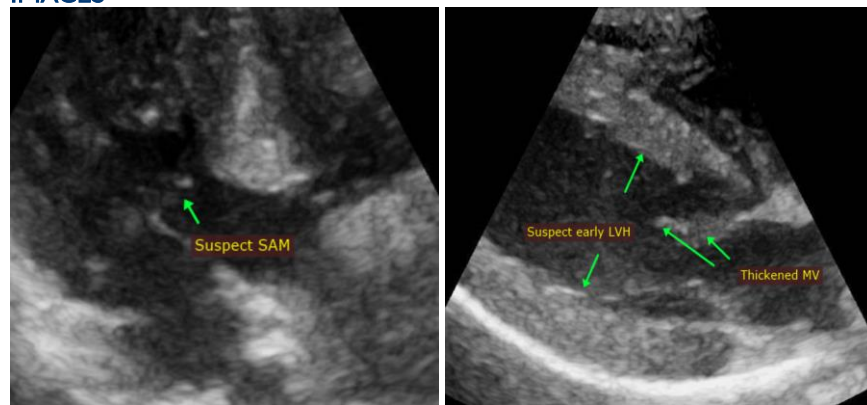
**AGE**

8 weeks

**IMAGES**

**WEIGHT**

4.8kgs



**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

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.

**IMAGING PERFORMED BY**

Nigel Gumley, DVM

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

**HOSPITAL NAME**

Cedarview Animal  
Hospital

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