



## PATIENT

Bogey Pulcine

## SPECIES

Canine

## BREED

Labrador Retriever

## SEX

Male Neutered

## AGE

4 years

## WEIGHT

39.1kgs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Nigel Gumley, DVM

## HOSPITAL NAME

Cedarview Animal  
Hospital

## REFERRING VET

Dr. Gumley

## INVOICE

22426

## DATE

2/8/22

## PRESENTING CLINICAL SIGNS

History: Chronic otitis externa. Recently episodes of sneezing but now resolved. Grade 2/6 heart murmur auscultated on exam as a new finding (not present in Nov 21). Grade 3/6 left apical systolic heart murmur, also audible on the right and mildly radiating. Normal femoral pulses. Systolic BP 105 to 109, diastolic from 67 to 74.

-Abnormal PE/Chem/CBC/UA Results: Borderline low Na, Cl, K. ALT = 146 (mild increase), rest normal

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The mitral valve leaflets appear normal in form and function with no thickening or prolapse into the left atrial lumen. Trivial mitral regurgitation noted with normal left atrial dimension. Normal LV diameter with adequate myocardial function. Normal LV wall thickness. The tricuspid valve appears subjectively normal, no tricuspid regurgitation. Normal right atrial and ventricular diameter and morphology. The pulmonic valve is normal in morphology and mobility. The aortic valve is normal with no aortic insufficiency. Mild subaortic narrowing in systole (see below). Normal pulmonic and mildly elevated aortic outflow velocity. No pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors identified.

## CARDIAC CHART

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			1.0	1.1	28	55	0.45
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	112	2.6	1.1	39.1	3.2	3.5	2.5
*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 cause of the murmur is mildly elevated blood flow velocity through the LVOT and aortic root, consistent with trivial sub-aortic stenosis (SAS). The LV wall dimensions are normal however, indicative of no significant pressure overload. This condition can be exacerbated by volume status



**PATIENT**

Bogey Pulcine

changes (anemia, dehydration) and/or heart rate, and may cause the murmur intensity to wax and wane. No additional issues are identified.

**SPECIES**

Canine

From a cardiac standpoint, monitor for development of labored breathing, exercise intolerance or collapse episodes, as SAS patients are more predisposed to development of arrhythmias than to CHF (particularly in this breed). No cardiac medications are indicated however as most patients with a hypoplastic root/mild SAS will live a normal life free of complications.

**BREED**

Labrador Retriever

Anesthetic risk is low. Avoid heart rate stimulating drugs such as atropine or glycopyrrolate unless clinically indicated. Recommend prophylactic antibiotics for any orthopedic or dental procedure in the future given slight predisposition to endocarditis.

**SEX**

Male Neutered

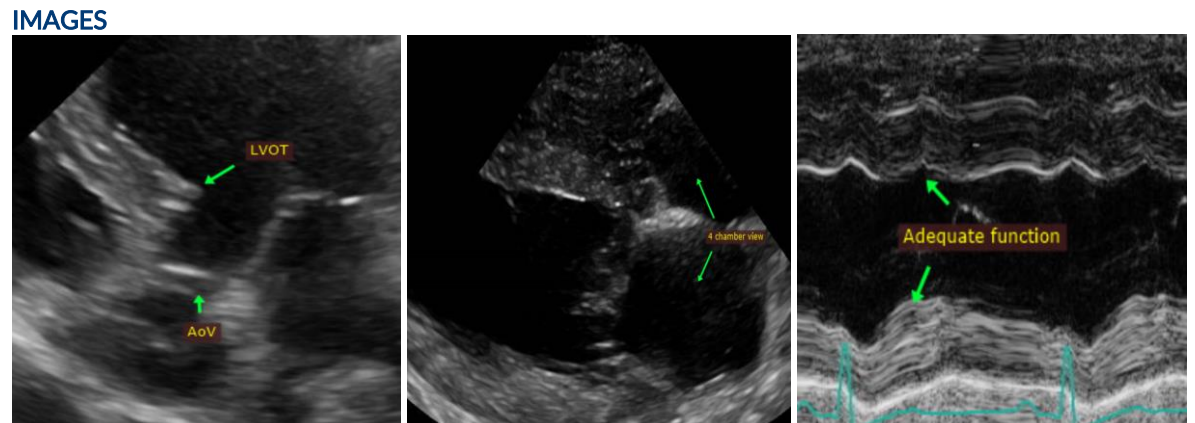
A recheck echocardiogram is recommended in 1 year to screen for progression.

**AGE**

4 years

**WEIGHT**

39.1kgs



**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

**Maggie Machen Lamy, DVM**  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com

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