



## PATIENT

Ooyagi  
Motschenbacher

## PRESENTING CLINICAL SIGNS

History: Grade 2/6 heart murmur. Assess prior to orthopedic surgery.  
-ECG report: Increased P wave duration, LAD.

## SPECIES

Canine

## BREED

Bulldog

## SEX

Male

## AGE

2.7 years

## WEIGHT

17.7lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Jacque Pankatz,  
DVM

## HOSPITAL NAME

Mountain Vista  
Veterinary Hospital

## REFERRING VET

Dr. Pankatz

## INVOICE

26393

## DATE

9/15/22

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Normal mitral valve with no obvious prolapse into the left atrial lumen. Trace central mitral regurgitation; normal left atrial dimension. Normal velocity. Normal LV diameter with adequate myocardial function. Normal LV wall thickness. The tricuspid valve appears normal in form and function with trace TR. Normal velocity. 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. No obvious subvalvular ridge evident, however there is trivial narrowing of the LVOT. Normal pulmonic outflow velocity. Mildly elevated aortic outflow velocity. Trivial aortic and no pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac tumors seen.

## 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	4.5	2.6	1.4	1.2	36	66	0.4
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	NM	2.2	1.0	8.0	2.5	3.2	2.1
*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 trivial subaortic stenosis. A subtle sub-aortic narrowing of the LVOT is visualized; however, the LV thickness is normal indicating the disease is likely of little clinical significance. A trivial aortic leak is noted which is hemodynamically insignificant at this time. Trace leaks are also noted in the mitral and tricuspid valves, which are of little significance. As this is a new heart murmur, screening lab work to look for exacerbating issues such as dehydration or anemia is recommended. It is reasonable to be monitored periodically via recheck echocardiography in the future. No cardiac medications are indicated at this time.



**PATIENT**

Ooyagi  
Motschenbacher

From a cardiac standpoint, monitor for development of a labored breathing, exercise intolerance or collapse episodes, as SAS patients are more predisposed to development of arrhythmias than to CHF.

**SPECIES**

Canine

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.

**BREED**

Bulldog

Recommend recheck echocardiogram in 12-18 months to screen for progression or development of concurrent cardiac disease that the preexisting murmur may mask.

**SEX**

Male

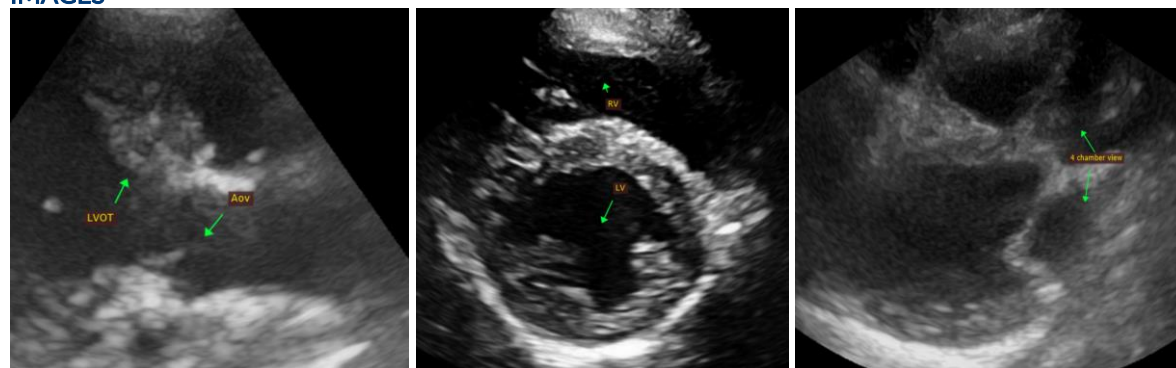
**AGE**

2.7 years

**WEIGHT**

17.7lbs

**IMAGES**



**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**

Jacque Pankatz,  
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.

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

**HOSPITAL NAME**

Mountain Vista  
Veterinary Hospital

**REFERRING VET**

Dr. Pankatz

**INVOICE**

26393

**DATE**

9/15/22