



**PATIENT**

Caysee Grasch

**PRESENTING CLINICAL SIGNS**

History: Presented for wellness exam and dental cleaning. A 1/6 left sided systolic heart murmur was noted. Assess prior to dental.

**SPECIES**

Canine

**BREED**

Boxer

**SEX**

Female Spayed

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Mild mitral valve leaflets with no prolapse into the left atrial lumen. Trivial mitral regurgitation with mild left atrial dilation. Normal LV diameter with adequate myocardial function. Normal LV wall dimensions with no obvious hypertrophy. The tricuspid valve appears normal with trace tricuspid regurgitation. Normal velocity. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic valve appears normal in morphology and mobility. Normal pulmonic outflow velocities with laminar flow. Mild thickening of the aortic valve; mildly increased LVOT velocity consistent with stenosis. Mild to moderate aortic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

**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	6.0	2.7	1.2	1.5	34	60	0.3
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	134	3.0	1.5	23.3	2.8	4.1	2.7
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				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 mild aortic stenosis due to a thickened aortic valve. No obvious subaortic ridge is visualized. This is typically a congenital issue, which has likely been unable to be auscultated previously. The mildly increased PG and normal LV wall thickness indicates the disease is likely of minimal clinical significance and prognosis is good. A mild to moderate aortic leak is identified, and a baseline BP is recommended every 6-12 months lifelong. The systolic function appears adequate without evidence of primary cardiomyopathy. Finally, small mitral and tricuspid leaks are noted, which may reflect early valve disease. Follow up is advised. No additional issues are identified.

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Kim Liedberg

**HOSPITAL NAME**

SVS Imaging WI

**REFERRING VET**

Dr. Panther

**INVOICE**

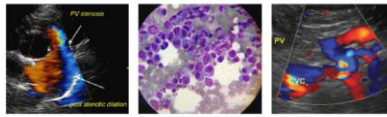
24397

**DATE**

5/24/22

**IMAGING PERFORMED BY**

svsmobileimaging.com 309-737-3070

**PATIENT**

Caysee Grasch

No cardiac medications are indicated at this time. From a cardiac standpoint, monitor for development of collapse episodes, labored breathing or exercise intolerance, as AS patients are more predisposed to development of arrhythmias than to CHF (particularly Boxers and Bulldogs).

**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.

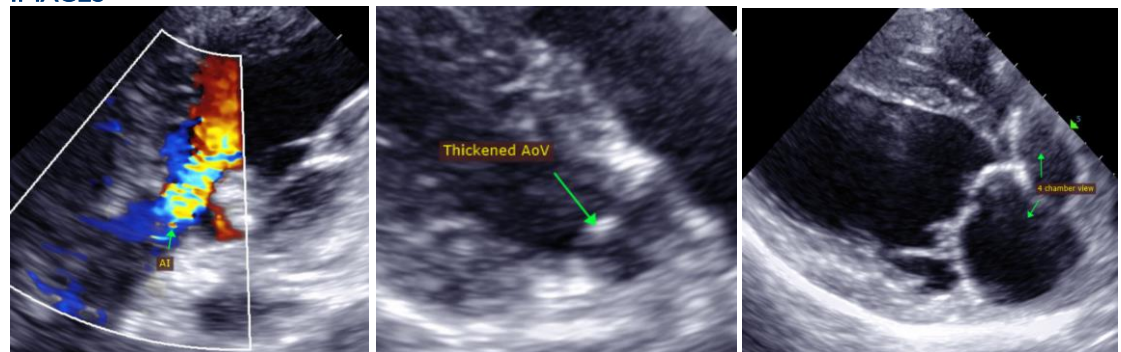
**BREED**

Boxer

Recommend recheck echocardiogram in 1 year to confirm no progression is seen, and to screen for development of concurrent cardiac disease that the preexisting murmur may mask.

**SEX**

Female Spayed

**IMAGES****AGE**

7 years

**WEIGHT**

51.4lbs

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.

**INTERPRETED BY**
 Maggie Machen Lamy,  
 DVM, DACVIM  
 (Cardiology)

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.

**IMAGING PERFORMED BY**

Kim Liedberg

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