



**PATIENT PRESENTING CLINICAL SIGNS**

Libby Bosch History: New grade II-III/VI heart murmur. No current meds.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Canine

**BREED**

Labrador Mix

**SEX**

Spayed female

**AGE**

8 years

**WEIGHT**

67.2 lbs

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. Trivial **mitral** valve insufficiency was noted in this patient. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract was structurally unremarkable; however, increased velocity was noted and not clinically significant. This may be a minor form of subaortic stenosis especially if the patient has had the murmur its entire life. Otherwise, other causes of hyperdynamic state and benign increased LVOT such as hypertension or volume shifts should be considered, yet this is not a structurally significant lesion. There is no contraindication to anesthesia. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Shari Reffi, CVT

**HOSPITAL NAME**

Animal Hospital of  
Sussex County

**REFERRING VET**

Dr. Ackernecht

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.19	1.19	45	76	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	150	2.38-2.5		67.2 lbs	2.69	3.93	

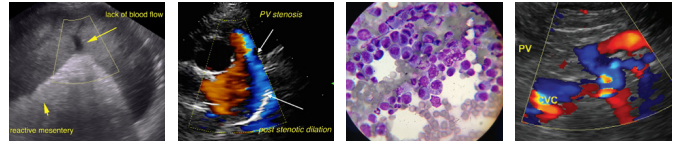
**INVOICE ULTRASONOGRAPHIC FINDINGS**

43506 Idiopathic, mildly increased LVOT velocity.

Possible minor form of subaortic stenosis, yet no clinically significant.

**DATE**

3/27/23



**PATIENT**

Libby Bosch

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

If the murmur grade increases a recheck echocardiogram is recommended in 6-12 months. Trivial mitral insufficiency is not clinically significant.

**SPECIES**

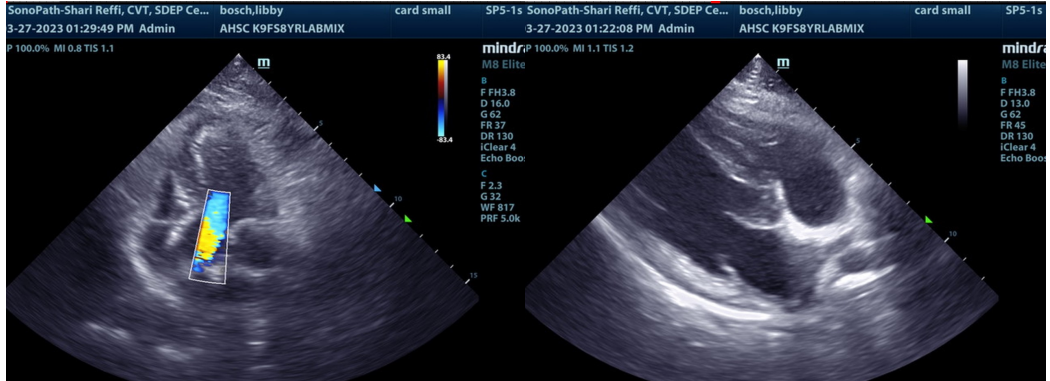
Canine

**BREED**

Labrador Mix

**SEX**

Spayed female

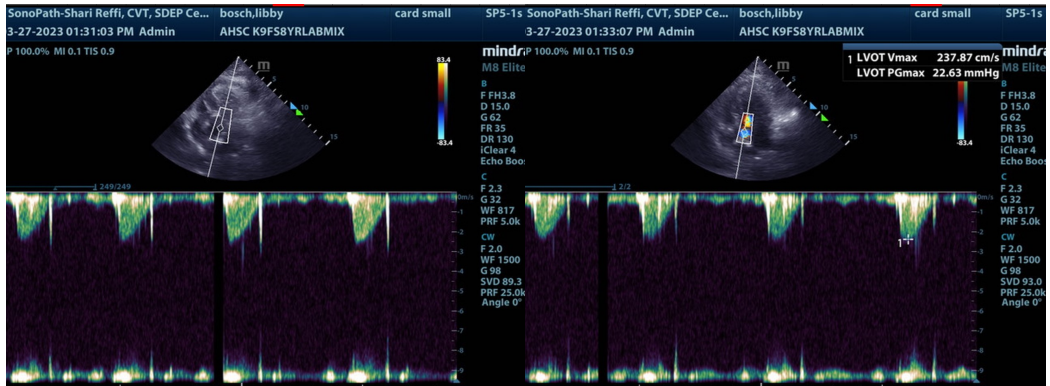


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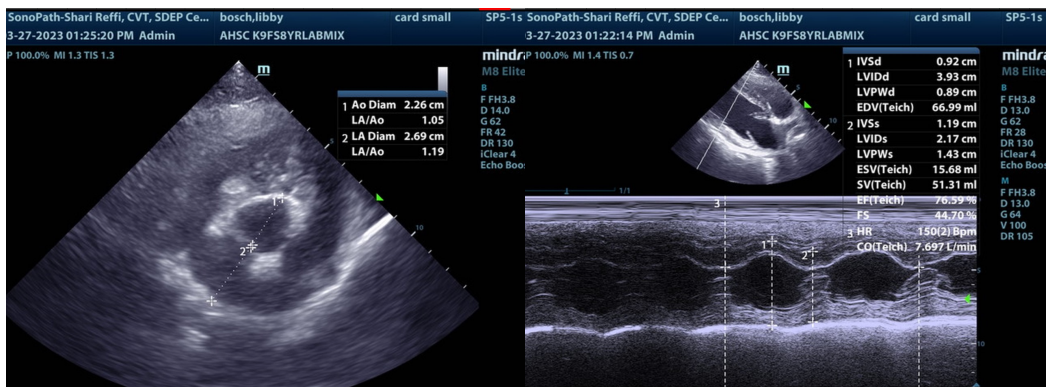
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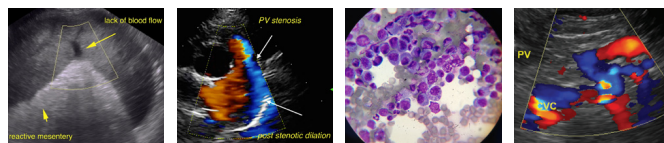


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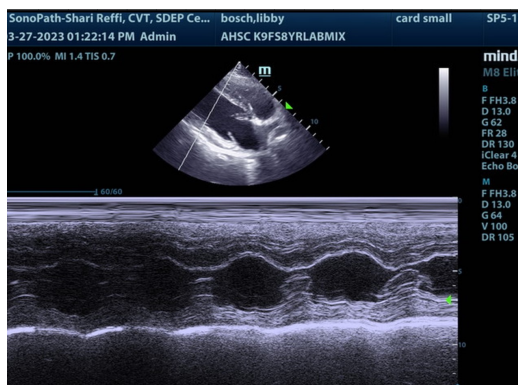
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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