



**PATIENT PRESENTING CLINICAL SIGNS**

**Kuba Pick** History: Presented for routine exam. Maybe slowing down a bit and "grumpier" than usual per owner but assumed it was due to the addition of a new puppy in the house.  
**Abnormal PE/Chem/CBC/UA Results:** Clinical Signs: none Significant/ relevant exam findings: heart murmur grade 3, both sides, arrhythmia noted on auscultation but ECG looks clear Lab work performed: N Radiographs: Y Date: August 23 Findings: VHS = 12. Heart appears globoid Current Medications: none Sedation: - usually butorphanol is sufficient - only if needed Expectations: trying to determine type of heart disease to best slow progression of disease - has been on grain-free Acana most of her life

**BREED**

Labrador Cross

**SEX**

Spayed female

**AGE**

10 years

**WEIGHT**

69 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUS

**IMAGING PERFORMED BY**

Kaitlyn Varga

**HOSPITAL NAME**

Shuswap VC

**PRESENTING CLINICAL SIGNS**

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

The echocardiogram in this patient demonstrated mildly enlarged **left atrial** size based on 3 separate methods of LA evaluation. Deviation of the atrial septum was noted. **Mitral** valve insufficiency was noted with centralized moderate jet on color flow assessment. Moderate filling of the left atrium was noted. There was mild volume overload of the **left ventricle** with slight subnormal **contractility** for this type of pathology. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right heart** was unremarkable. There was no **pericardial or pleural effusion**.

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			1.4	1.7	28	54	0.8
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	0.5		5.7 max	4.63	

**ULTRASONOGRAPHIC FINDINGS**

Mitral insufficiency with mild left atrial enlargement.  
 Stage B2 valvular disease.  
 Mildly subnormal contractility.

No free fluid or extracardiac pathology noted in the acoustic windows provided.

**REFERRING VET**

Dr. Kiehlbauch

**INVOICE**

32527

**DATE**

8/24/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**



**PATIENT**

Kuba Pick

Thyroid assessment, screening for Addison's with baseline cortisol and blood pressure measurements are indicated. I recommend dietary assessment to ensure that the patient is not on a grain free diet. Pimobendan is recommended at 0.3 mg/kg b.i.d.

**SPECIES**

Canine

The heart has some volume overload and is working to compensate for the valvular insufficiency. Target respiratory rate is < 20 resp/minute after therapy. After initiating therapy, I recommend recheck on the clinical exam, BUN, Creatinine, USG, Chest radiographs & Blood pressure in 5-7 days. Recheck echo in 1 month. Earlier if clinical decompensation is occurring. I do not recommend anesthesia at this time until stabilization has occurred on the recommended medications. Repeat preanesthetic echo is ideal if anesthesia is eventually necessary

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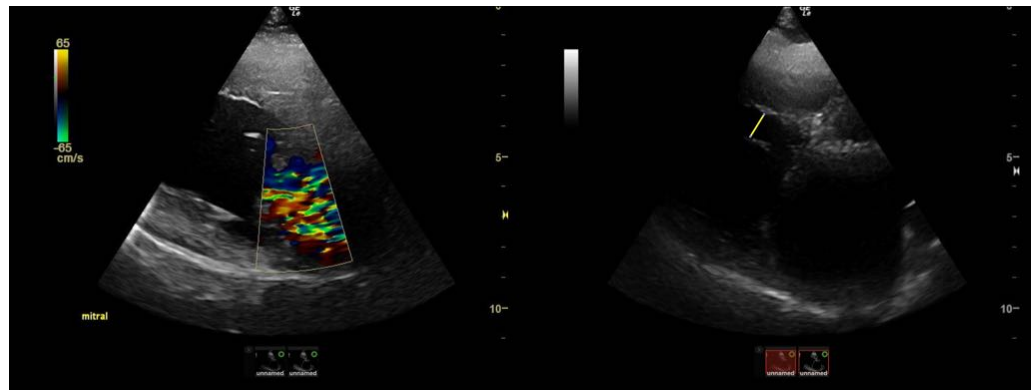
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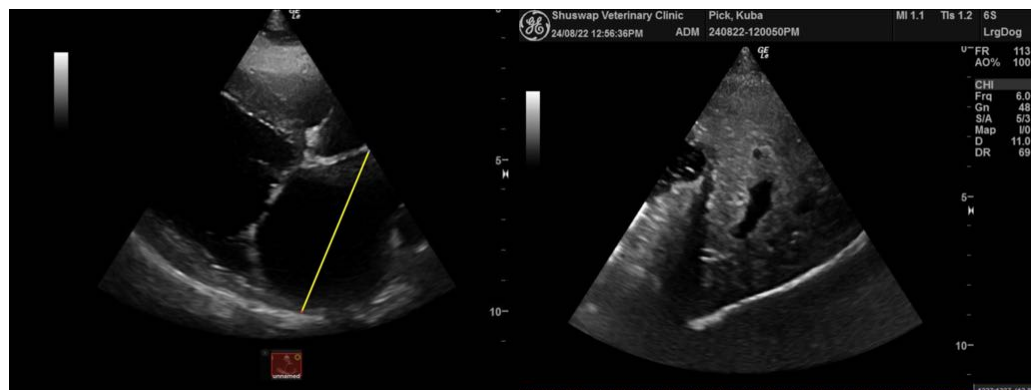
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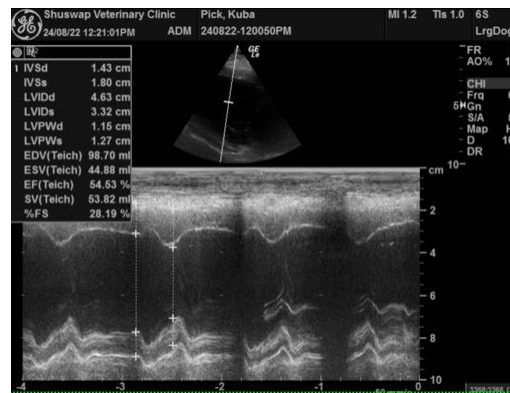
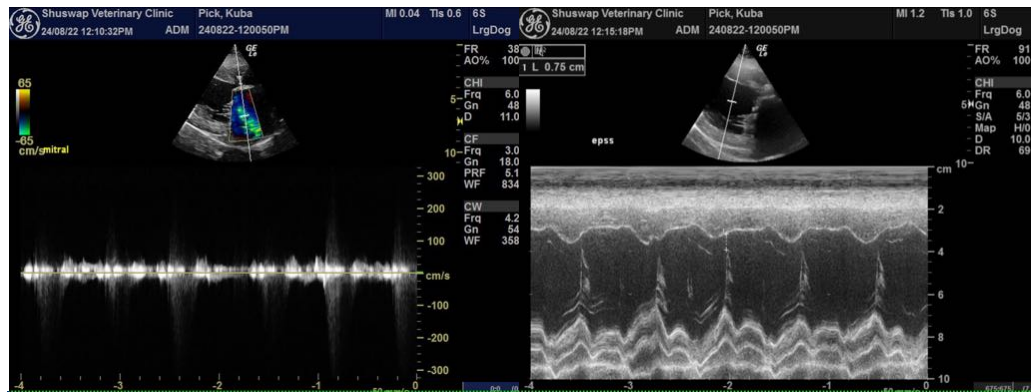
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
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