



PATIENT

Kona Hess

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

8 Years 8 Months

WEIGHT

15 pounds

INTERPRETED BY

Eric Lindquist, DMV,
DABVP(CFM), Cert.
IVUSS

IMAGING PERFORMED BY

Dr. Kitz

HOSPITAL NAME

Woodlands Animal
Hospital

REFERRING VET

Dr. Danielle Kitz

INVOICE

14347

DATE

03/15/26

PRESENTING CLINICAL SIGNS

- History of heart murmur that had been Grade I-II for a few years and recently progressed to a Grade III
- Recommend screening echo

Abnormal PE/Chem/CBC/UA Results: Grade III left parasternal systolic murmur Normal heart rate and rhythm and s/s pulses

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT		UE	1.3	1.9	47	80	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (lbs)	LAD LA MAX 4 Chamber	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				
PATIENT	80	1.17	0.74	15.0	3.06	2.84	--

Cardiac Presentation

The **left atrium** presented slight enlargement with mild deviation to the atrial septum. The left atrial septum in this patient is borderline slightly enlarged in the LA max and LA/AO heart base positions, consistent with very early stage B2 valvular disease and should be confirmed with radiographs. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. The **left ventricle** presented normal 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 demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** 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. No echographically detectable evidence of infiltrative



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disease was visible. The cranial mediastinum and pericardial regions were free of masses in the visible window.

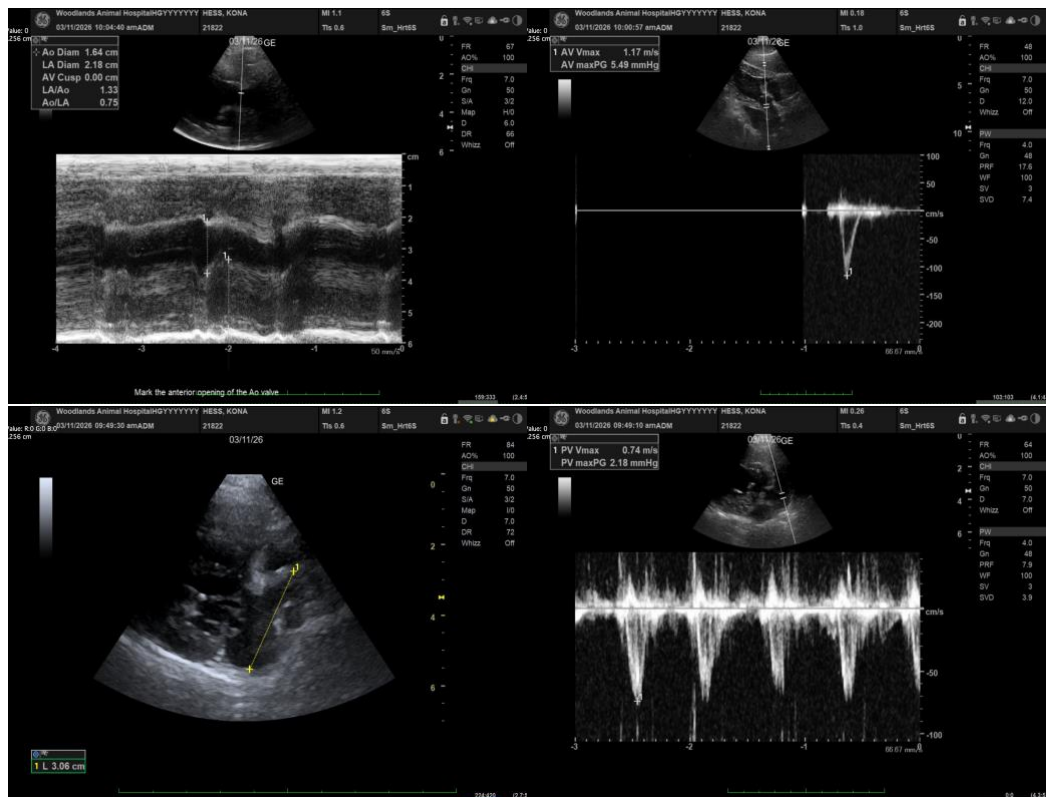
ULTRASONOGRAPHIC FINDINGS

- Stage B2 valvular disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The heart has minor volume overload and is working to compensate for the valvular insufficiency. Target respiratory rate is < 20 resp/minute after therapy. After initiating or adjusting therapy, I recommend recheck on the clinical exam, BUN, Creatinine, USG, Chest radiographs & Blood pressure in 5-7 days. Recheck echo in 6 months, earlier if clinical decompensation is occurring. Minor anesthetic risk for a brief procedure at this time. Repeat preanesthetic echo is ideal if anesthesia is eventually necessary. A suggested anesthetic combination would involve Torbutrol premed, propofol induction, Isoflurane maintenance or equivalent protocol.

Recommend initiating Pimobendan at 0.30 mg/kg as well as blood pressure management.





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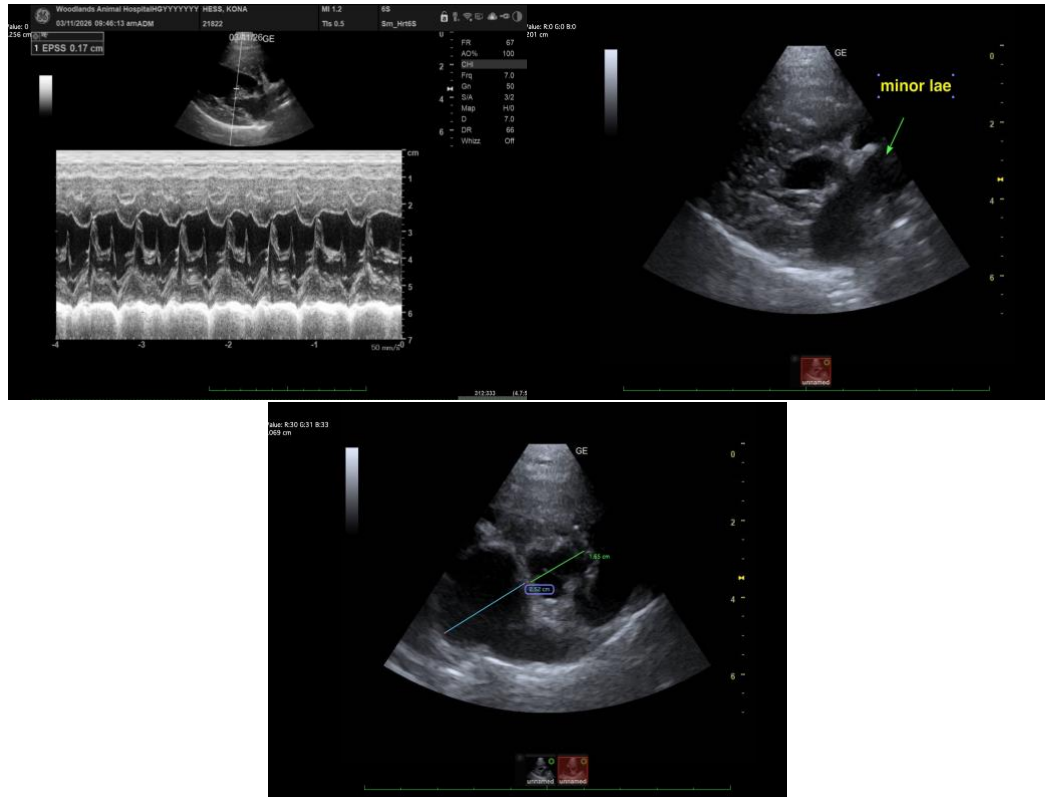
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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(CFM), Cert. IVUSS,

CEO, Owner, Founder -- SonoPath.com

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