



PATIENT PRESENTING CLINICAL SIGNS

Phoebe Velez Establish baseline echo for heart murmur. Dental disease/halitosis, grade 2-3/6 murmur (per owner has been there at least a year) S.S.P, lungs clear. Meds: Apoquel, no cardiac meds

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

11 Years 3 Months

WEIGHT

10.6 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rebecca Hamilton

HOSPITAL NAME

Advanced Veterinary
Care

REFERRING VET

Dr. Vogt

INVOICE

15261

DATE

04/20/26

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	6.5	--	1.4	1.3	46	79	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	125	1.21	1.2	10.6	2.9	2.8	--

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. 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 disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. Occasional arrhythmia was present in this patient.

ULTRASONOGRAPHIC FINDINGS

- Mitral valve insufficiency.
- Occasional arrhythmia.



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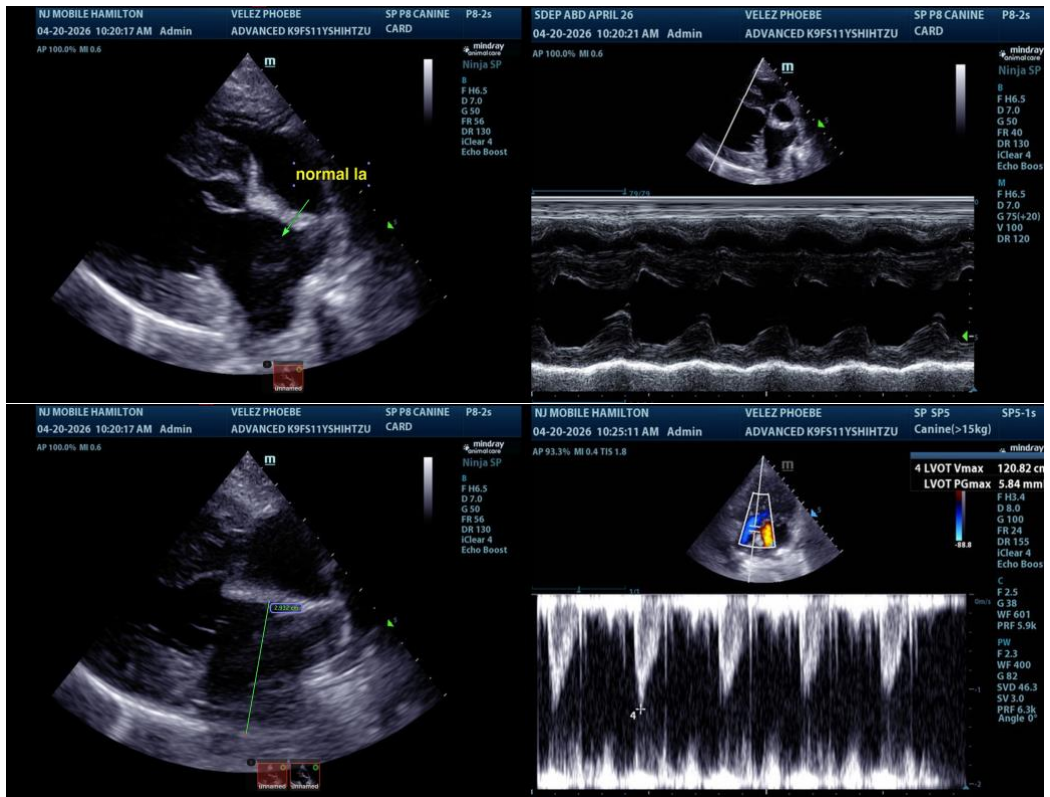
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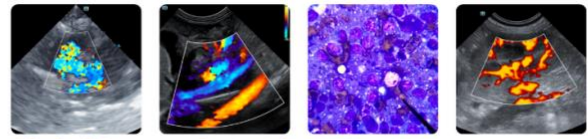
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the elevated mitral insufficiency velocity in this patient, I strongly recommend serial blood pressure to rule out systemic hypertension. Long EKG is indicated as well to assess for arrhythmogenic activity as periodic arrhythmias were noted during the exam. No evidence of volume overload or cardiac dysfunction at this point. If the patient is normotensive and EKG is benign, then no overt contraindications to anesthetic procedure.

The heart is stable without clinical disease. No overt contraindication for anesthesia of brief to moderate duration. I suggest Torbutrol premed, Propofol induction, Isoflor maintenance or similar protocol if anesthesia is desired. Blood pressure, EKG and chest radiographs are recommended if not already performed. Target white coat negative systolic pressure of < 160 mmHg. If higher than this ACE-inhibitor is suggested to reach this level. Recheck echocardiogram is recommended in 6-12 months, earlier if murmur grade increases or clinical signs initiate.





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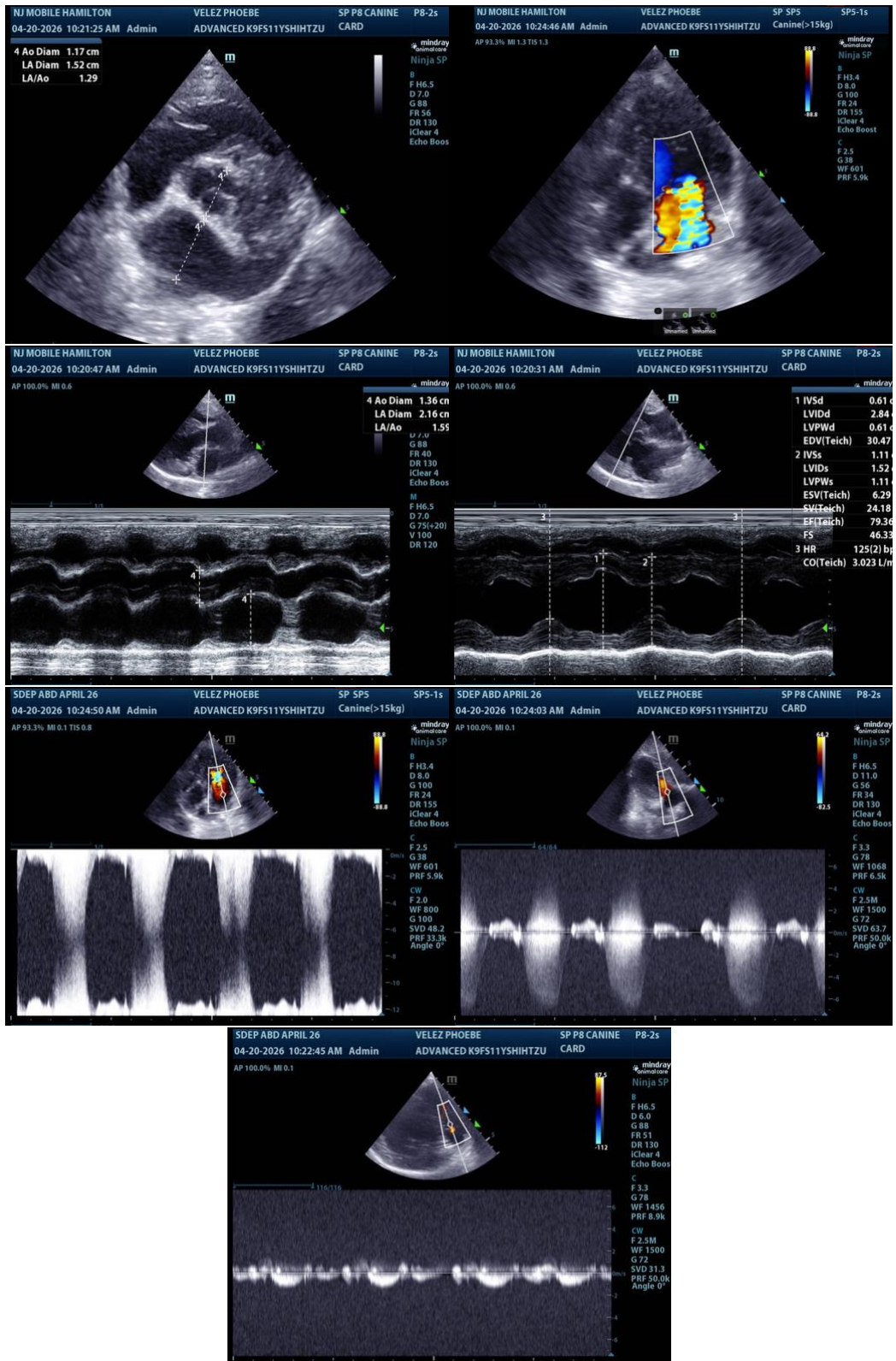
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES

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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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Shih Tzu

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CEO, Owner, Founder -- SonoPath.com

info@SonoPath.com

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