



PATIENT PRESENTING CLINICAL SIGNS

PATIENT Sasha Peterson
SPECIES Canine
BREED Chihuahua X
SEX Spayed Female
AGE 12 Years 11 Months
WEIGHT 11.7 Pounds

History of mod-sev dental disease, needs a dental - heart murmur 1/6. Pre-op radiographs and ECG show signs of heart disease. Cardiac work up prior to dental for best anesthetic plan. IDEXX ECG report attached - ECG showed sinus tachycardia with increased R wave amplitude.
 Abnormal PE/Chem/CBC/UA Results: Chem 10/CBC shows Alkp low @ 17, CBC normal See attached radiographs - enlarged R heart

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	5.3	2.6	1.21	1.23	35.9	68.9	0.18
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				
PATIENT	NM	1.56	0.8		2.3	2.4	

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Amanda Crook – SDEP Certified Clinical Sonographer

HOSPITAL NAME

Rivers Edge PMC

REFERRING VET

Dr. David Gray

INVOICE

33620

DATE

12/21/21

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 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. Mild tricuspid valve insufficiency present on color doppler. 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. No evidence of arrhythmogenic disease.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B1)
- Mild TR



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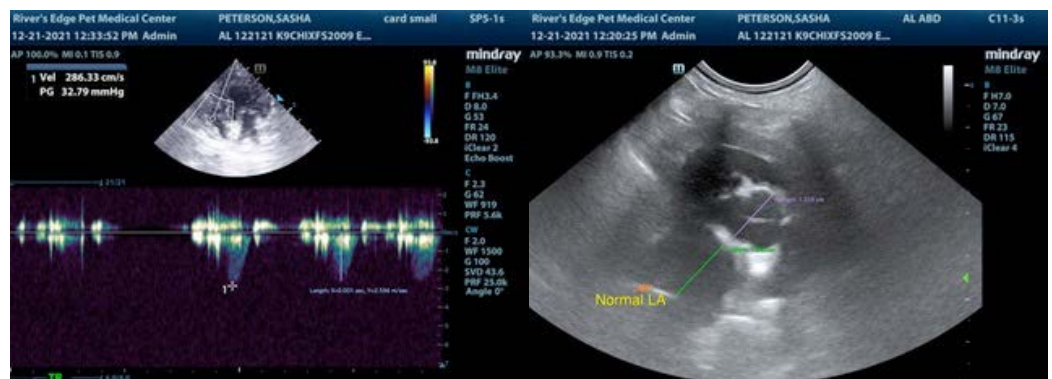
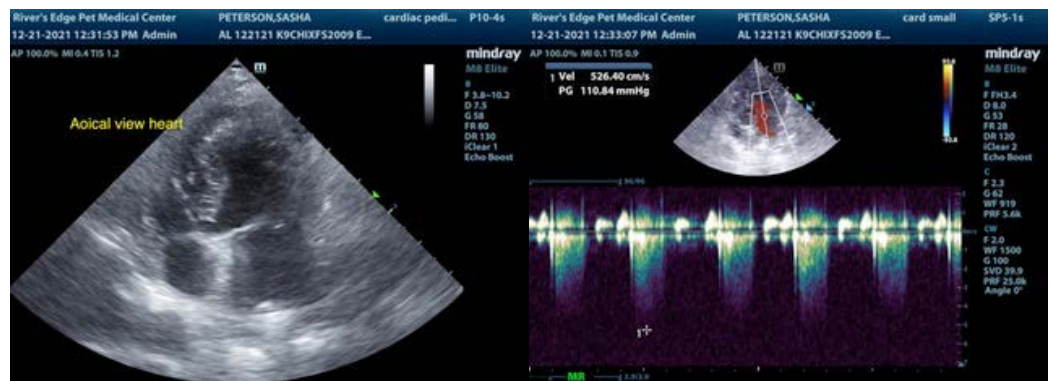
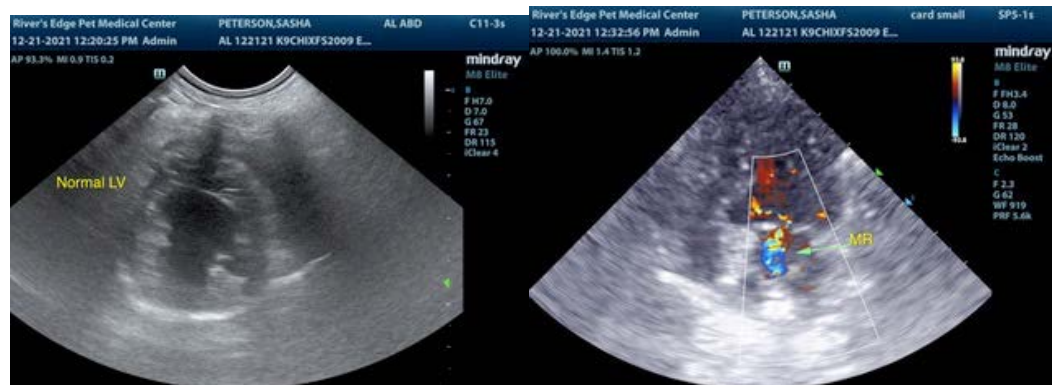
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the mild murmur in this patient is most consistent with mild chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency. Concurrent tricuspid regurgitation was also present, yet the estimated pulmonary pressure gradient (approximately 26-27 mmHg) was not consistent with clinical pulmonary hypertension. No other clinical issues such as right heart cardiomegaly or systolic dysfunction were noted.

In a non-clinical patient without evidence of significant chamber enlargement owing to mitral valve insufficiency, cardiac medications are not specifically indicated. Given the lack of left atrial enlargement, the risk of current complication is considered low. However, prognosis may be variable. Recheck sonogram recommended in 6 months, sooner if clinical signs suggestive of heart disease develop. No overt anesthetic contraindications based on this echocardiogram. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.





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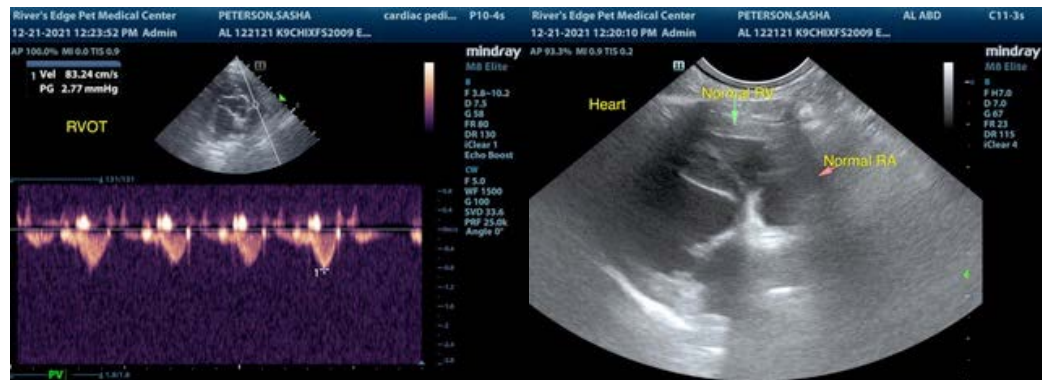
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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