



PATIENT PRESENTING CLINICAL SIGNS

Taj Walker History: Heart murmur on wellness exam, working up for MMVD or other cause of heart murmur. Owner reports slowing down and not as active. Wanting to evaluate heart prior to anesthesia for dentistry.

SPECIES Abnormal PE/Chem/CBC/UA Results: Murmur grade 5/6, left systolic Thoracic radiographs - VHS 12.5, no pleural effusion, no pulmonary edema.

Canine

BREED ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Pomeranian 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. Complete filling of the mitral valve was noted on color flow assessment of the mitral valve. Prolapse of the anterior mitral valve leaflet was noted. 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. 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.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jolee Stegemoller

HOSPITAL NAME

North Idaho AH

REFERRING VET

Dr. Morgan

INVOICE

42867

DATE

2/16/23

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	5.3		1.5	1.9	55		0.1
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		1.7	0.7	4.04		3.0	



PATIENT

Taj Walker

SPECIES

Canine

BREED

Pomeranian

SEX

Neutered male

AGE

8 years

WEIGHT

4.04 kg

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ULTRASONOGRAPHIC FINDINGS

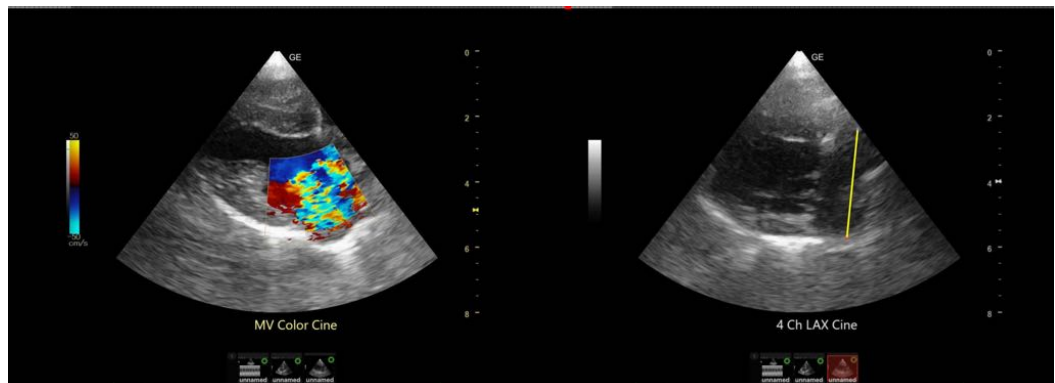
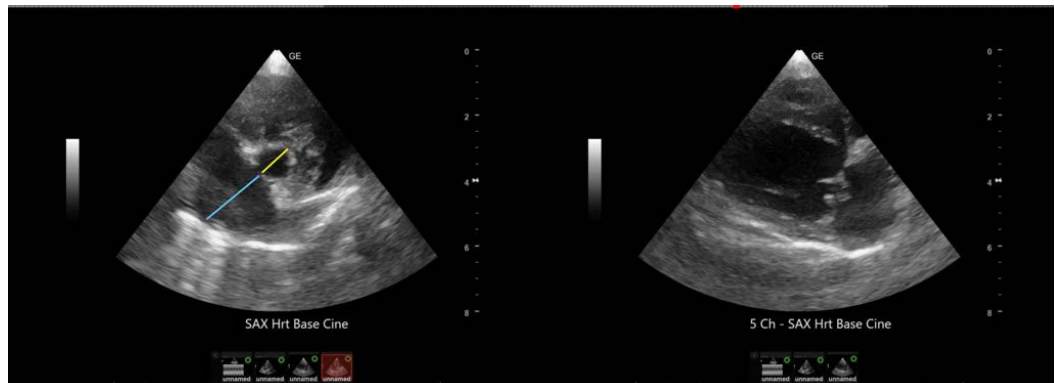
Mitral insufficiency.

Left atrial enlargement.

Stage B2 valvular disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I recommend initiating Pimobendan at 0.3 mg/kg b.i.d. If systolic blood pressure is greater than 160 then ace inhibitor therapy can be considered. There is some anesthetic risk in this patient. Ideally a recheck echocardiogram is recommended in 7-10 days. Torbutrol pre med, Propofol induction and Isoflurane maintenance protocol is recommended.





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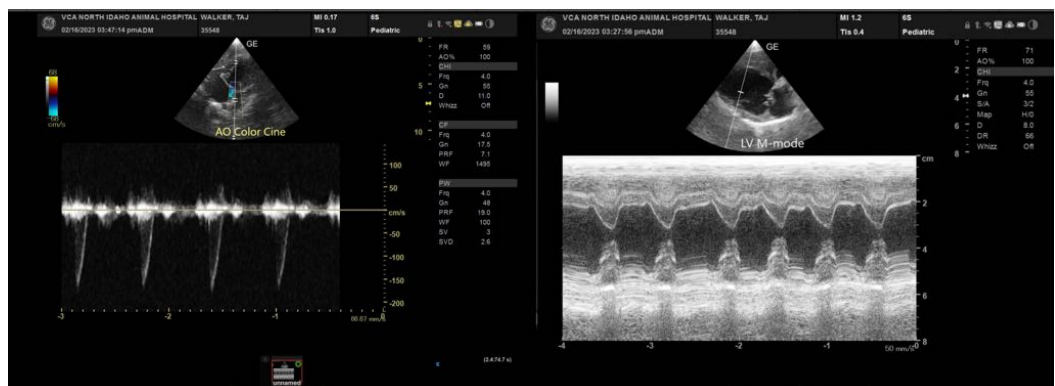
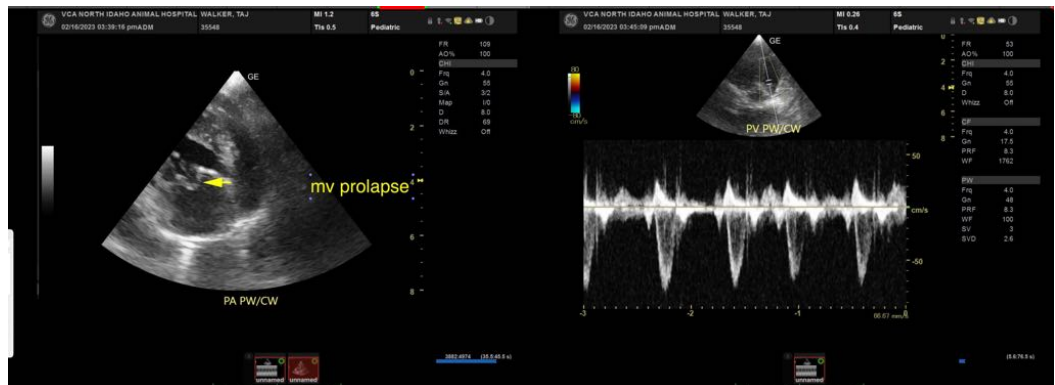
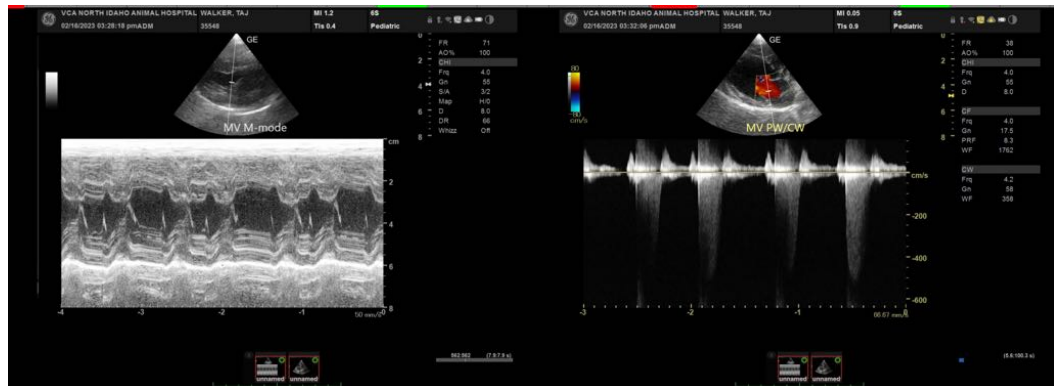
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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