



PATIENT PRESENTING CLINICAL SIGNS

Daisy Phillips

History: History of ill-thrift as a puppy and arrhythmia noted before presentation. Presented to our hospital on 10/14 for coughing and exercise intolerance over the last few months. She has been a picky eater and not gaining weight. Is eating traditional diet. UTD on vaccinations and no other history. Since starting therapy listed below patient has gained weight and is no longer coughing.

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: No murmur ausculted, but arrhythmia noted, BCS 3/9.

BREED

Labrador Retriever

Radiographs: Moderate enlargement of heart, increased VHS, concern for RA enlargement. Pulmonary edema (perihilar) present. ECG: The predominant rhythm is atrial fibrillation. The predominant rhythm is interrupted by ventricular ectopic beats which occur as isolated beats and runs of accelerated idioventricular rhythm. Current medications: Diltiazem 30 mg 1 tid, Furosemide 40 mg 1.5 bid, Enalapril 10 mg bid, Vetmedin 5 mg 1 in am, 1.5 in evening.

SEX

Female

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The echocardiogram in this patient presented significant arrhythmia with severe volume overload of the left atrium and left ventricle. Mitral and minor tricuspid insufficiency was noted. The contractility appeared adequate, yet was significantly compromised during ectopic beats. The hepatic veins were not dilated. There was no significant right sided cardiac disease noted.

AGE

1 year

WEIGHT

63 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUS

IMAGING PERFORMED BY

Dr. Stegemoller

HOSPITAL NAME

North Idaho AH

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	5.6	1.5	NM	> 2.5			NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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			0.9	63 lbs	8.7 max	6.7	

REFERRING VET

Dr. Mehra

ULTRASONOGRAPHIC FINDINGS

Arrhythmogenic disease.

Mitral insufficiency.

INVOICE

Left-sided volume overload.

92592

DATE

10/22/21



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further imaging of the left ventricular outflow is warranted in this patient to assess for aortic stenosis as well as color flow Doppler of the deep pulmonary artery to rule out PDA. However, I would expect a holosystolic murmur on clinical exam in that case. However, from a sonographic standpoint I cannot rule out these two potential congenital lesions. Otherwise, causes of myocarditis should be considered as well as nutritional cardiomyopathy. However, it appears to be a primary valvular issue at the mitral valve along with secondary arrhythmia that may be primary or secondary to volume overload and myocardial stretch. Cardiology referral is ideal in this case. I recommend adding to the current protocol Spironolactone at 1-2 mg/kg b.i.d. and Vetmedin can be increased to t.i.d. dosing at 0.3 mg/kg t.i.d. A Holter monitor is warranted given the patient's history and assessment for exposure to infectious agents especially if the patient had Parvo virus during its lifetime.

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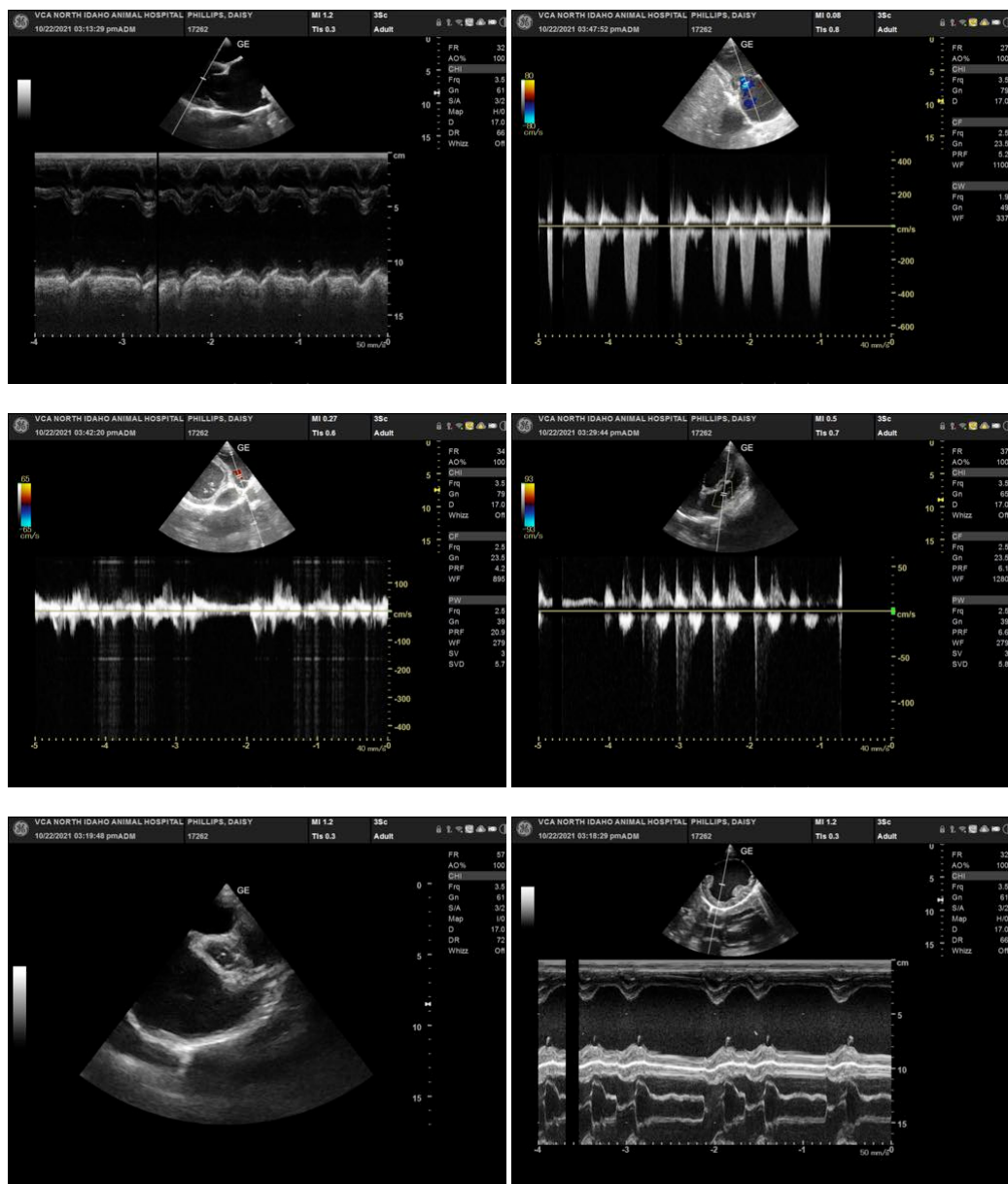
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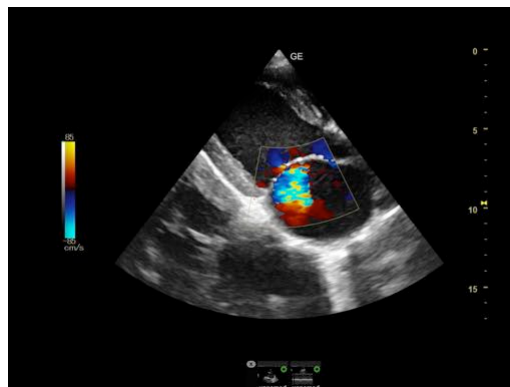
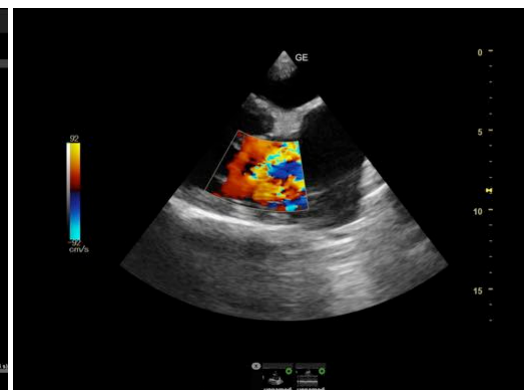
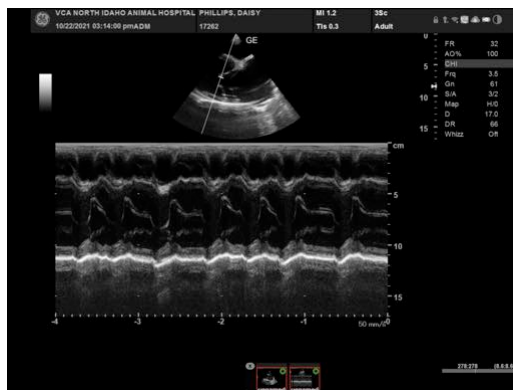
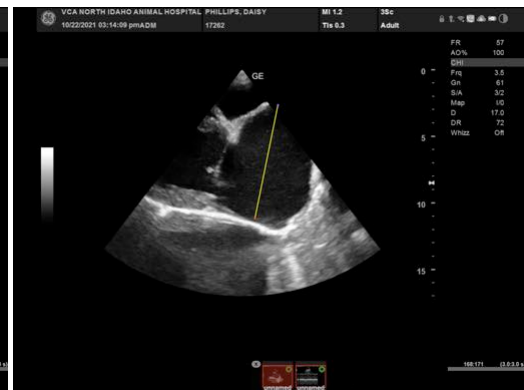
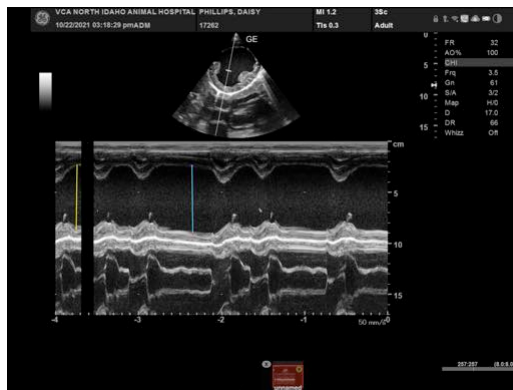
Dr. Mehra

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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.

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