



**PATIENT PRESENTING CLINICAL SIGNS**

Charlie Allegro History: Cardiomegaly, pulmonary edema, dyspnea. Current meds: T/F/HWP only

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Canine

The **left atrial** and left ventricular volume overload was noted in this patient. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. Aortic velocity was subnormal. Mild volume overload was noted in the right heart as well and measured 2.5. **Right atrial** enlargement was present with **tricuspid** insufficiency. **Pulmonary outflow** 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. Pulmonary edema was noted in the peripheral fields.

**BREED**

Labrador Retriever

**SEX**

Neutered male

**AGE**

6 ½ years

**WEIGHT**

89 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Shari Reffi, CVT

**HOSPITAL NAME**

Newton VH

**REFERRING VET**

Dr. Barron

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	<1.3	28-40	40-100	<0.6
PATIENT			NM	2.5	10		
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		1.0		89 lbs	6.2 max	6.8	

**ULTRASONOGRAPHIC FINDINGS**

Volume overload in all 4 chambers with poor contractility.

Mitral and tricuspid insufficiency

Excessive EPSS

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

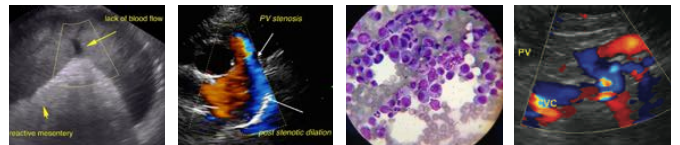
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30133

**DATE**

5/4/22

There was no pericardial effusion noted. Pulmonary edema was noted. Arrhythmogenic activity was noted. This is most consistent with dilatative cardiomyopathy; however, nutritional cardiomyopathy and myocarditis can present in the same fashion. I recommend quadro therapy in this patient and cage rest. Lasix is recommended at 2-4 mg/kg b.i.d., ace inhibitor at 0.5 mg/kg s.i.d. progressing to b.i.d., Pimobendan at 0.3 mg/kg b.i.d. and Spironolactone at 1-2 mg/kg b.i.d. Taurine levels as well as tick borne disease panel is warranted. Broad spectrum antibiotic such as Clindamycin could be considered to treat for myocarditis. Recheck echocardiogram is recommended in 7-10 days if the patient is able to survive the immediate crisis. Prognosis is very guarded. EKG is indicated as well as blood pressure



**PATIENT**

measurements. The patient is at risk for sudden death.

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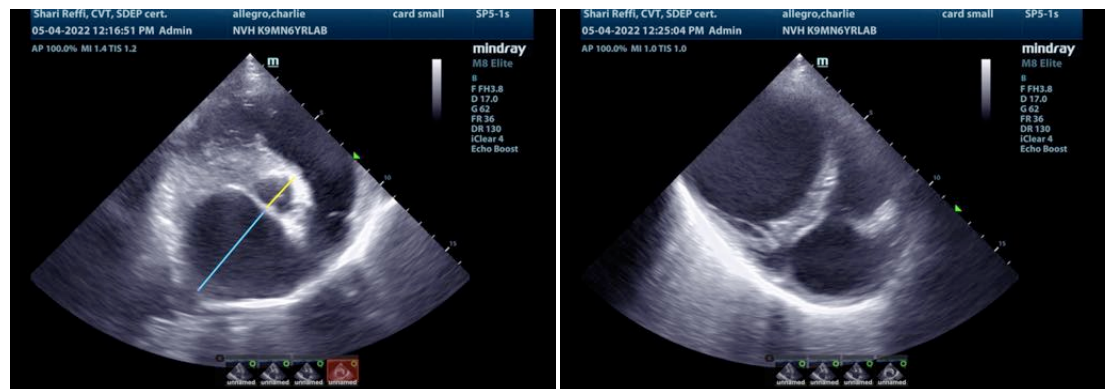
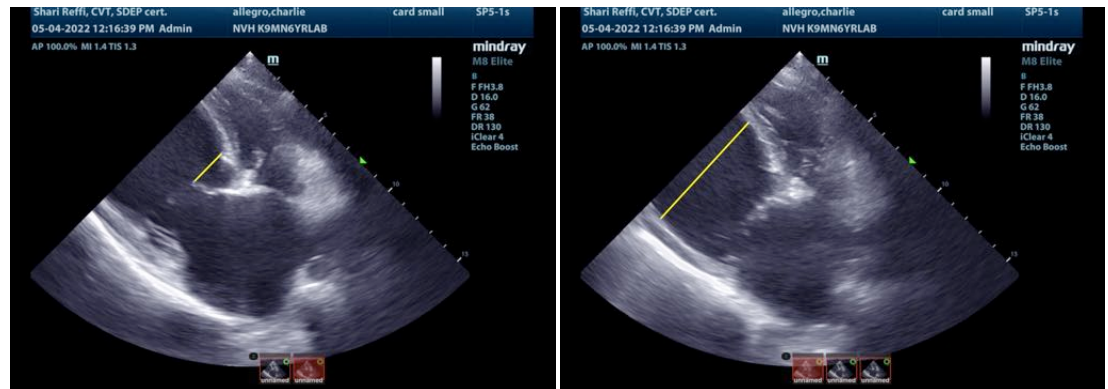
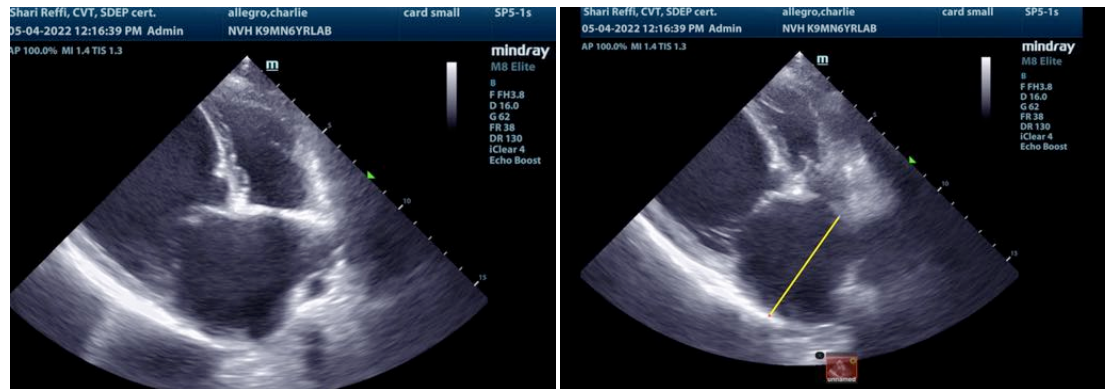
Dr. Barron

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**PATIENT**

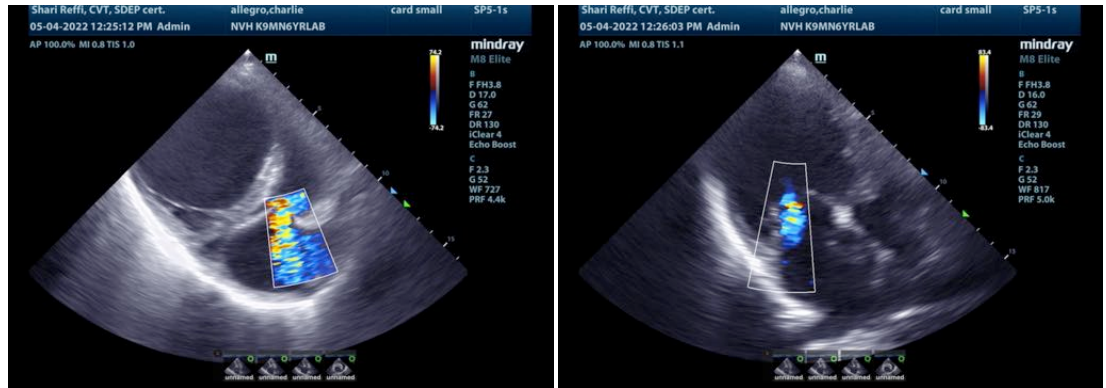
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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, Cert. IVUSS, CEO of SonoPath.com  
Info@SonoPath.com