



PATIENT

Delta Wolf

SPECIES

Canine

BREED

Labrador Retriever

SEX

Female

AGE

2 years

WEIGHT

61.2 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Epes

HOSPITAL NAME

Animal Clinic of Oxford

REFERRING VET

Dr. Epes

INVOICE

68611

DATE

11/12/25

PRESENTING CLINICAL SIGNS

History: Delta has been training in Oxford for duck hunting. Trainer noticed exercise intolerance and over malaise at the kennel. Delta presented and was diagnosed with a 2-3/6 bilateral heart murmur that is more easily heard on the right side. Rads show a tall cardiac silhouette with a globoid appearance on VD.

Abnormal PE/Chem/CBC/UA Results: 2-3/6 bilateral murmur with no crackles

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. 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. **Right atrial** enlargement was noted. **Tricuspid** valve appeared elongated and mildly thickened. Color flow Doppler of the tricuspid valve revealed insufficiency; however, the degree of insufficiency is unclear. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **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. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window. Arrhythmogenic activity was noted in this patient. The hepatic veins were not dilated. There was no evidence of volume overload. Arrhythmogenic activity was noted.

| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO | 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 | - | - | 1.1 | 1.3 | 30 | | 0.1 |
| 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 | BELOW | BELOW | BELOW | BELOW |
| PATIENT | 60-80 | - | - | 61.62 lbs | 2.4 | 3.8 | |



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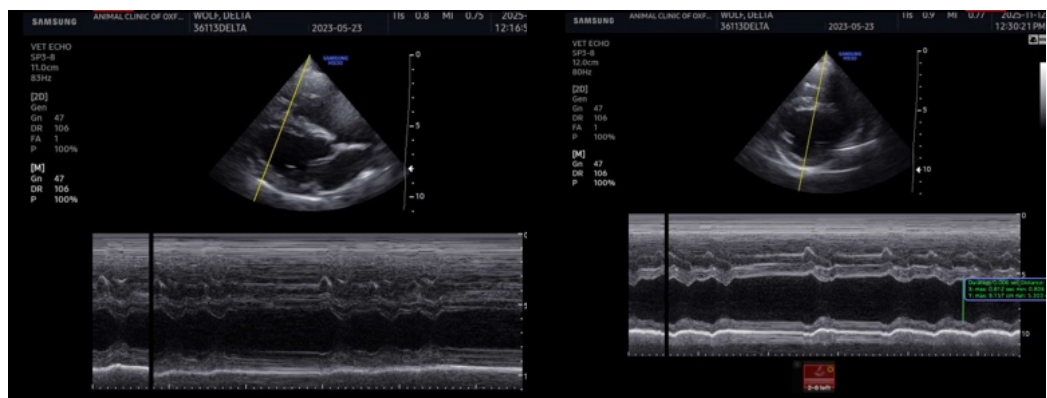
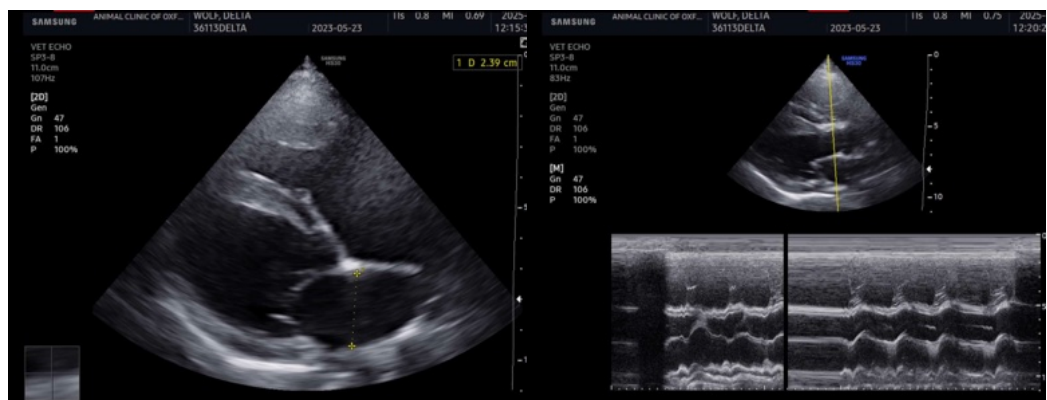
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ULTRASONOGRAPHIC FINDINGS

- Possible tricuspid dysplasia with mild right atrial enlargement.
- Arrhythmogenic activity.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I recommend Holter monitor in this patient. Further Doppler evaluation of the tricuspid valve with spectral and color flow assessment is indicated, yet even though the tricuspid valve appears abnormal this may not be the underlying issue. Arrhythmogenic activity is more likely the issue. Holter monitor is indicated. Assessment for infectious causes of myocarditis would be warranted.





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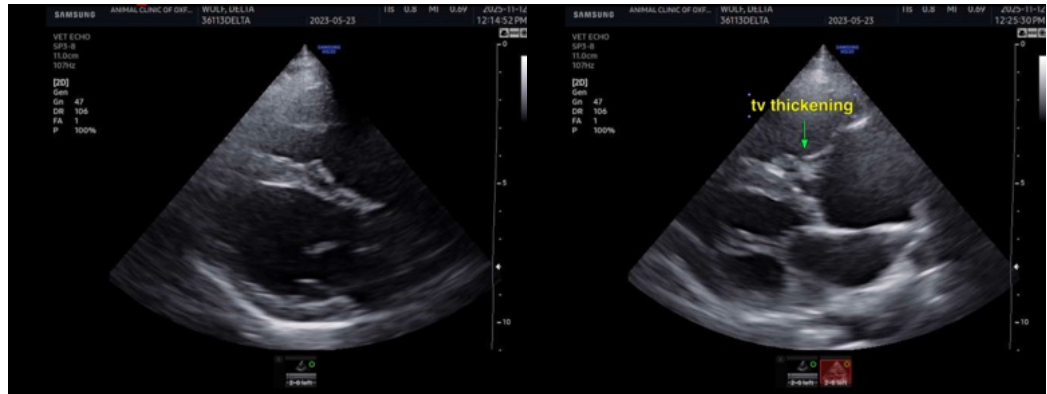
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP (CFM), Cert. IVUSS, CEO of SonoPath.com

info@SonoPath.com