



## PATIENT

Wrigley Goeseels

## PRESENTING CLINICAL SIGNS

Cough. Grade 3/67 murmur. Cardiomegaly on CXR. Lethargic.

## SPECIES

Canine

## BREED

Boxer Mix

## SEX

MN

## AGE

6yr

## WEIGHT

33.3kg

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dave Stasiuk

## HOSPITAL NAME

Properties Animal  
Clinic

## REFERRING VET

Dr. Kangai

## INVOICE

13452ag

## DATE

04/13/2023

## 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	<1.3	28-40	40-100	<0.6
PATIENT		3.0		2.4	21	42	2.3
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	0.9	0.7		6.1	7.0	

## Cardiac Presentation

Severe left ventricular dilation with diminished systolic function was present. Significantly increased EPSS and increased LV sphericity were noted. Decreased LV wall thickness was present with concurrent severe left atrial enlargement and bulbous appearance. The mitral valve appears mildly thickened with no obvious prolapse. Significant primarily centralized to mild eccentric mitral regurgitation was present. The tricuspid valve appeared normal. Mild TR was present on Doppler. Mild to moderate right atrial dilation with borderline right ventricle dilation was present. The aortic valve appeared normal with decreased measured LVOT velocity. No overt AI. Normal pulmonic valve and normal measured RVOT velocity was present. No overt pulmonic insufficiency. No pericardial or pleural effusion was noted. No obvious cardiac tumors. No overt arrhythmia.

## ULTRASONOGRAPHIC FINDINGS

- Severe LA/LV enlargement with LV systolic dysfunction.
- Mild to moderate RA enlargement.
- Moderate primarily centralized to mild eccentric MR.
- Mild TR-estimated pulmonary pressure gradient consistent with mild increased pulmonary pressure.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cardiac presentation is consistent with DCM or DCM-like criteria which may be primary in nature or possible secondary to conditions such as taurine deficiency, hypothyroidism, myocarditis or less likely infiltrative disease such as lymphoma. Primary DCM may be a primary differential diagnosis if no previous history or grain free/exotic diet or infectious disease. Thyroid status can be assessed +/- taurine levels and/or troponin level if clinically indicated. Long term prognosis is extremely guarded to likely poor as this patient is at significantly increased risk for current or future CHF, malignant arrhythmias or sudden death.



**PATIENT**

Wrigley Goeseels

Pimobendan 0.3 mg/kg PO BID, Lasix/spironolactone combination both 1-2 mg/kg PO BID and taurine supplementation if clinically indicated is recommended. ACE inhibitor medication could be considered if systemic BP >130. Monitoring of renal panel with recheck echocardiogram in 3-4 months, sooner if progressive cardiac clinical signs is advised.

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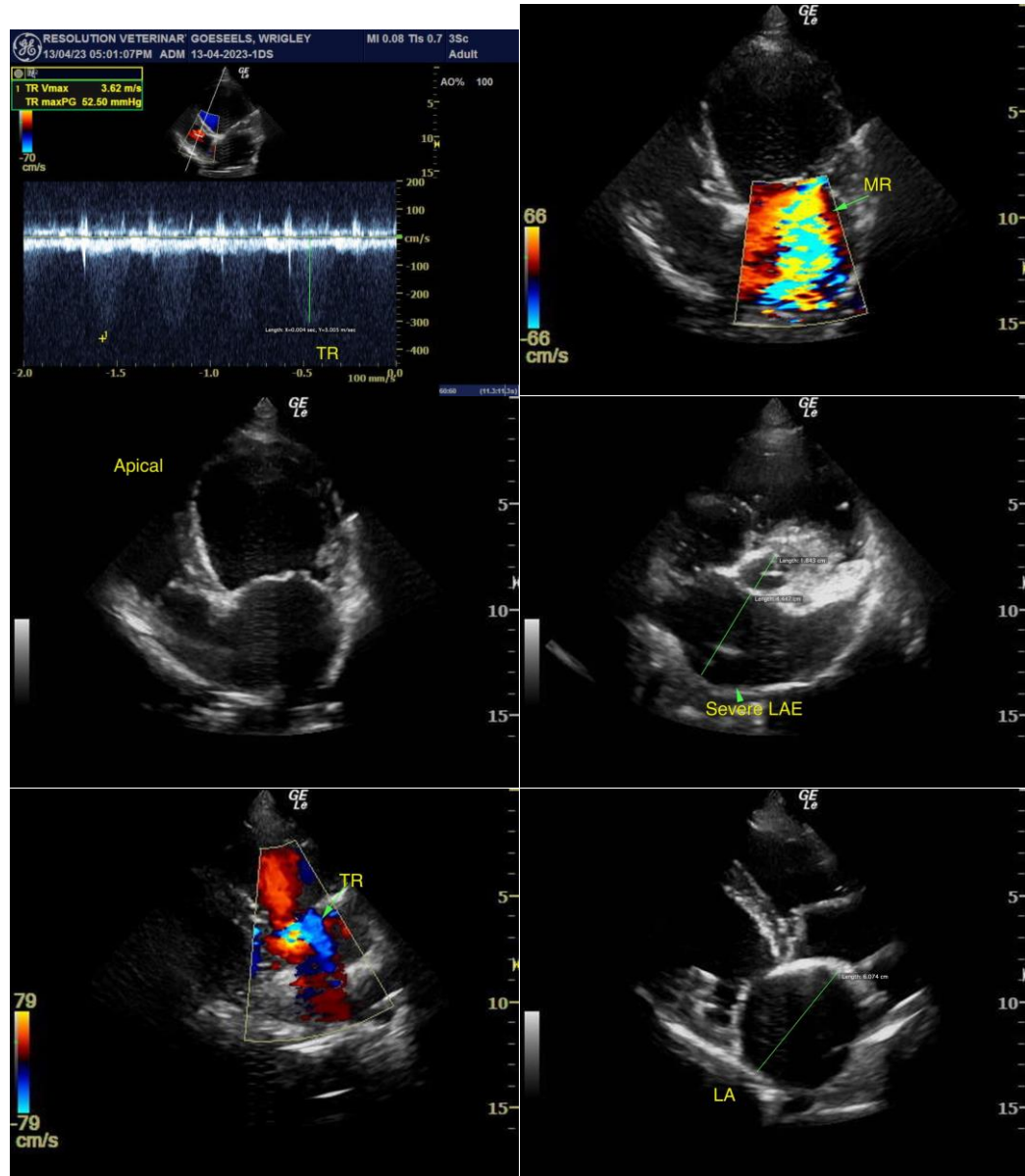
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**PATIENT**

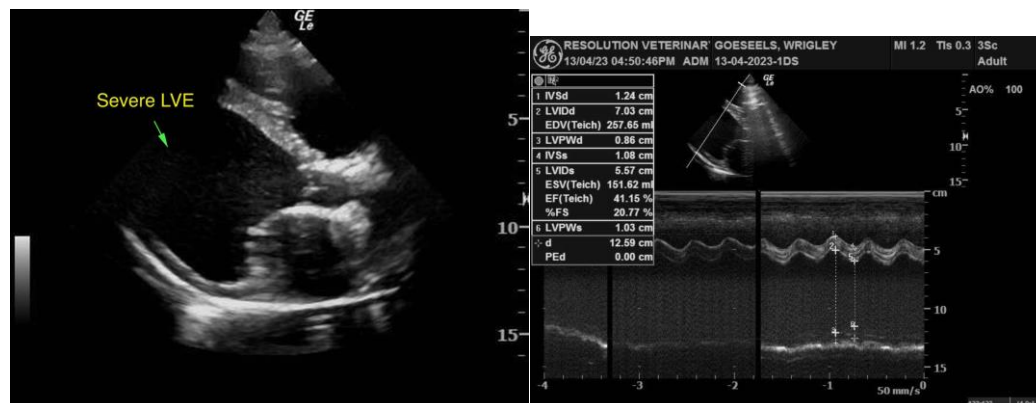
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
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