



PATIENT

Coco Land

PRESENTING CLINICAL SIGNS

History: Collapsing episodes. Panting. Normal in-house ECG. Moderate heart murmur. Heartworm negative.

SPECIES

Canine

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Normal mitral valve leaflets with no obvious prolapse into the left atrial lumen. No obvious mitral regurgitation. Normal left atrial dimension. Normal LV diameter with adequate myocardial function. The LV wall appears normal. The tricuspid valve appears normal with no obvious insufficiency seen. Moderate right atrial dilation. Significant right ventricular dilation and hypertrophy indicative of pressure overload. Pulmonic outflow velocities are normal. The pulmonic valve is unable to be visualized. Trace pulmonic insufficiency. The MPA and proximal branches are significantly dilated. The aortic valve appears to have normal morphology and mobility. No obvious cardiac shunts are present. No pericardial or pleural effusion noted.

BREED

Cockapoo

SEX

Female Spayed

CARDIAC CHART

AGE

3 years

WEIGHT

13.6lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

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	NA	NA	1.3		53	87	0.2
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	200	0.9	0.7	6.2		1.8	0.8
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most striking finding is significant pressure overload of the right heart. The main pulmonary artery and branches appear dilated without an obvious cause visualized. Rule outs for these findings include pulmonic stenosis (valvular v branch/distal), primary pulmonary hypertension, secondary PAH due to lung disease (such as from a prior respiratory infection/inflammation like distemper, prior HW infestation, etc.), an extra-cardiac R-L shunt (PDA), and/or other complex congenital abnormality not appreciated on this study. Advanced diagnostics are recommended in this unusual case as simply pulmonary hypertension is unlikely to rule out alternative explanations in this young dog. These include but are not limited to advanced echo, a bubble

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DATE

7/30/23

HOSPITAL NAME

River Road Animal
Clinic

REFERRING VET

Dr. Houston

Lindsey Daniel, DVM



PATIENT

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study, angiography, and/or thoracic CT scan. Highly recommended referral in this complicated case.

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If referral is declined, consider further patient evaluation looking for abnormalities such as **caudal cyanosis** or hemoconcentration which would suggest Eisenmenger's physiology from a R-L shunt. If neither is apparent, consider treating for pulmonary hypertension and assessing response.

BREED

Cockapoo

Regardless of diagnosis, these findings are significant and will likely limit lifespan, with risk for right-sided CHF in the future. Prognosis is guarded to poor long-term, and our goal is to improve quality of life.

SEX

Female Spayed

Monitor for development of associated clinical signs (collapse, abdominal distention, cough, labored breathing). Moderate exercise restriction is advised.

Anesthetic risk is elevated and is not advised prior to a definitive diagnosis.

AGE

3 years

PLAN

Highly recommend referral for a definitive diagnosis in this complicated case. If declined, evaluate for caudal cyanosis, hemoconcentration, etc. Baseline CXR with a Radiologist review are strongly recommended. If referral is declined and no additional diagnoses are obtained, consider trial of Sildenafil 1-2mg/kg PO q8h and Pimobendan 0.3mg/kg PO q12h. Primary respiratory work-up/treatment is indicated as discussed.

WEIGHT

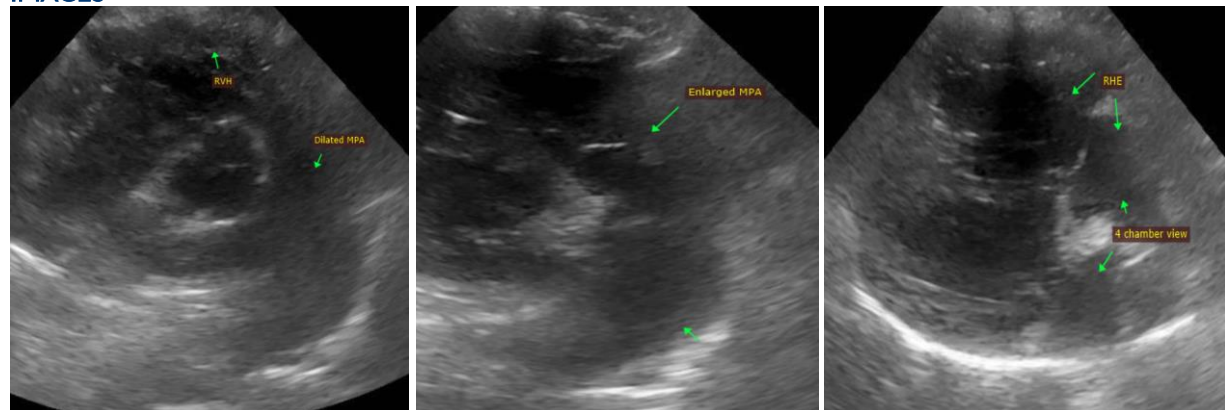
13.6lbs

Recommend recheck echocardiogram in 6 months to screen for progressive changes.

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IMAGES



IMAGING PERFORMED BY

Lindsey Daniel, DVM

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Dr. Houston

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.

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Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. 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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Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)



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