



PATIENT PRESENTING CLINICAL SIGNS

Luke Bryant History: Rads: Tri-cavitary effusion

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: Muffle heart sounds, hind limb weakness, soft non formed stool Alb 1.8, chol 59, k 5.9 Pcv/ts: (peripheral blood): 34/4.6 last night 30/4 Peritoneal- 0/3.6 Pleural- 0/0.6 Pericardial with suspected blood contamination- 33/4.4 Ua- no protein or significant findings BP - 120-130 HR - Was 180 but post tap 120s

BREED

Lab

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

SEX

Neutered male

AGE

13 years

WEIGHT

29.7 kg

INTERPRETED BY

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

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	NM	NM	1.38	23.9	52.1	0.65
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	NM	NM		4.25	4.6	NM

IMAGING PERFORMED BY

Andrea Nicastro

HOSPITAL NAME

Veterinary Specialty
Care Blue Pearl Mt.
Pleasant

REFERRING VET

Dr. Shannon Graham

Cardiac Presentation

Mild to potential moderate left ventricle enlargement with reduced LV systolic dysfunction was present. Mildly increased EPSS and subjective increased LV sphericity was observed. Mild subjective decreased LV wall thickness and normal LA size was noted. The mitral valve appears mildly thickened without evidence of prolapse into the LA lumen or chordae tendinea rupture. Mild primarily centralized to subtly eccentric MR was present. The tricuspid valve appears mildly thickened exhibiting minor TR. Subjective mild RA and ventricular dilation was observed. The aortic valve appears normal without evidence of structural pathology. No AI was present. The pulmonic valve and RV outflow were overtly normal. No overt PI was present. Scant pericardial and mild volume pleural effusion noted. No obvious cardiac or pericardial tumors were observed.

INVOICE

10349ag

DATE

04/12/2022

ULTRASONOGRAPHIC FINDINGS

- Mild to moderate LV enlargement exhibiting LV systolic dysfunction.
- Normal LA.
- Subjective minor enlarged RA/RV.
- Mild centralized to eccentric MR.
- Mild TR.



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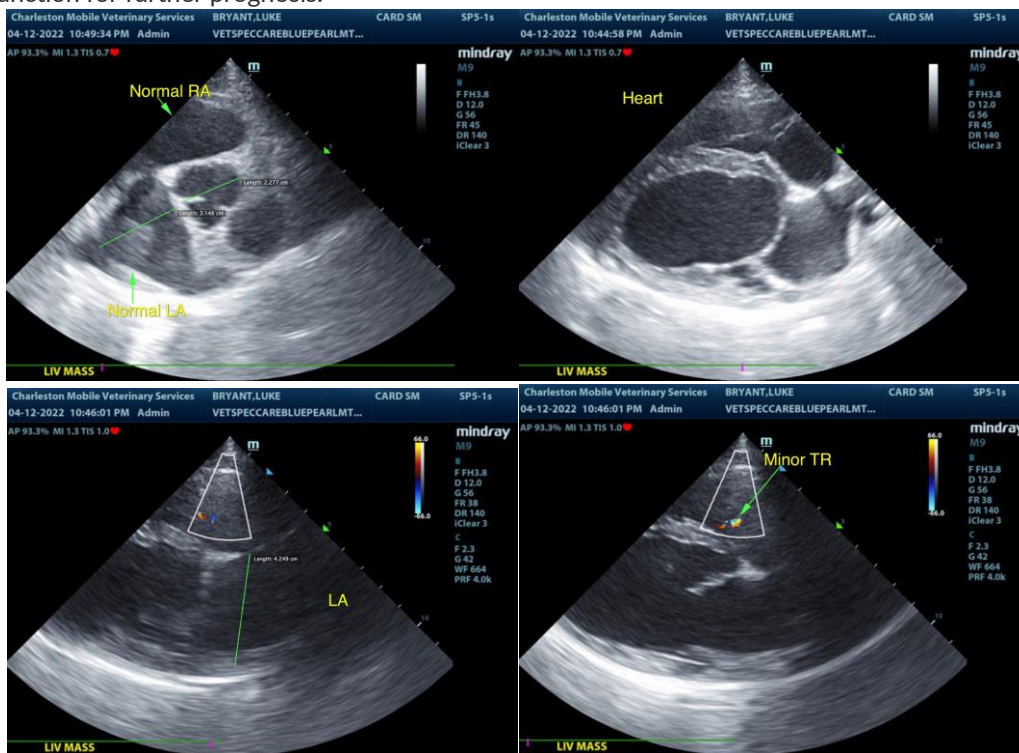
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Aside from scant pericardial and mild volume pleural free fluid, the primary finding of the echocardiogram is the mild to moderately enlarged left ventricle with LV systolic dysfunction exhibited by the reduced FS measurement. Although not definitive, this could indicate primary emerging cardiac disease i.e. DCM like cardiomyopathy or potentially be secondary to taurine deficiency (if clinically applicable), hypothyroidism (if clinically applicable), myocarditis or infiltrative disease. Even with some degree of LV enlargement and systolic dysfunction, the lack of LA enlargement (not consistent with left sided congestion or failure) combined with the lack of significant right heart enlargement with minor TR (not overtly suggestive of clinical pulmonary hypertension or right heart failure) indicates that the tri cavitory effusion in this case is not overtly cardiogenic in origin. Correlation with abdominal ultrasound to assess for evidence of hepatic congestion as well as effusion analysis cytology +/- C/S if clinically indicated is recommended.

Given the LV systolic dysfunction, Pimobendan 0.3 mg/kg PO BID is warranted. Serial sonographic monitoring is recommended for evidence of progressive cardiac changes or progressive LV systolic dysfunction for further prognosis.



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)

info@SonoPath.com



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