



PATIENT PRESENTING CLINICAL SIGNS

Olive Renshaw • bnp-1,213

SPECIES Abnormal PE/Chem/CBC/UA Results: rbc-9.07 hemat-64.4 hemo-23.2 wbc-5.4

Canine **ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

BREED	CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO M-mode	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
Bulldog								
SEX	NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
FS	PATIENT	--	--	--	1.35	40	74	0.2
AGE	CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LAD LA MAX 4 Chamber	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
6yr								
WEIGHT	NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
60lb	PATIENT	NM	1.7	1.1	60lb	4.2	3.9	--

INTERPRETED BY

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

IMAGING PERFORMED BY

Kerri Becker

HOSPITAL NAME

Loving Care VH

REFERRING VET

Dr Steele

INVOICE
24122

DATE
03/05/2026

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 2 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. No overt MR on Doppler. 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. Normal measured LVOT velocity. The right atrium and auricle revealed normal size, structure and content. No evidence of masses was noted. Tricuspid valvular assessment demonstrated adequate linear morphology and kinesis. Minor TR on Doppler. 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). Normal measured RVOT velocity. No visible pericardial or free pleural fluid was noted. The cranial mediastinum and pericardial and extra-cardiac regions were free of masses in the visible window. No evidence of arrhythmia.



PATIENT

Olive Renshaw

ULTRASONOGRAPHIC FINDINGS

Primary

- Normal cardiac structure/ function for breed

SPECIES

Canine

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of clinical issues such as left or right heart chamber enlargement, LV systolic dysfunction, significant valvular insufficiencies, or pulmonary hypertension. A BNP positive test does not overtly mean cardiac disease is present. False positive BNP results may occur with renal insufficiency, airway disease, systemic hypertension, or other systemic influences, which may be considered. No indication for cardiac medication. Recheck echo is recommended if progressive BNP elevation or if clinical signs consistent with cardiac disease arise. No anesthetic contraindications.

BREED

Bulldog

SEX

FS

AGE

6yr

WEIGHT

60lb

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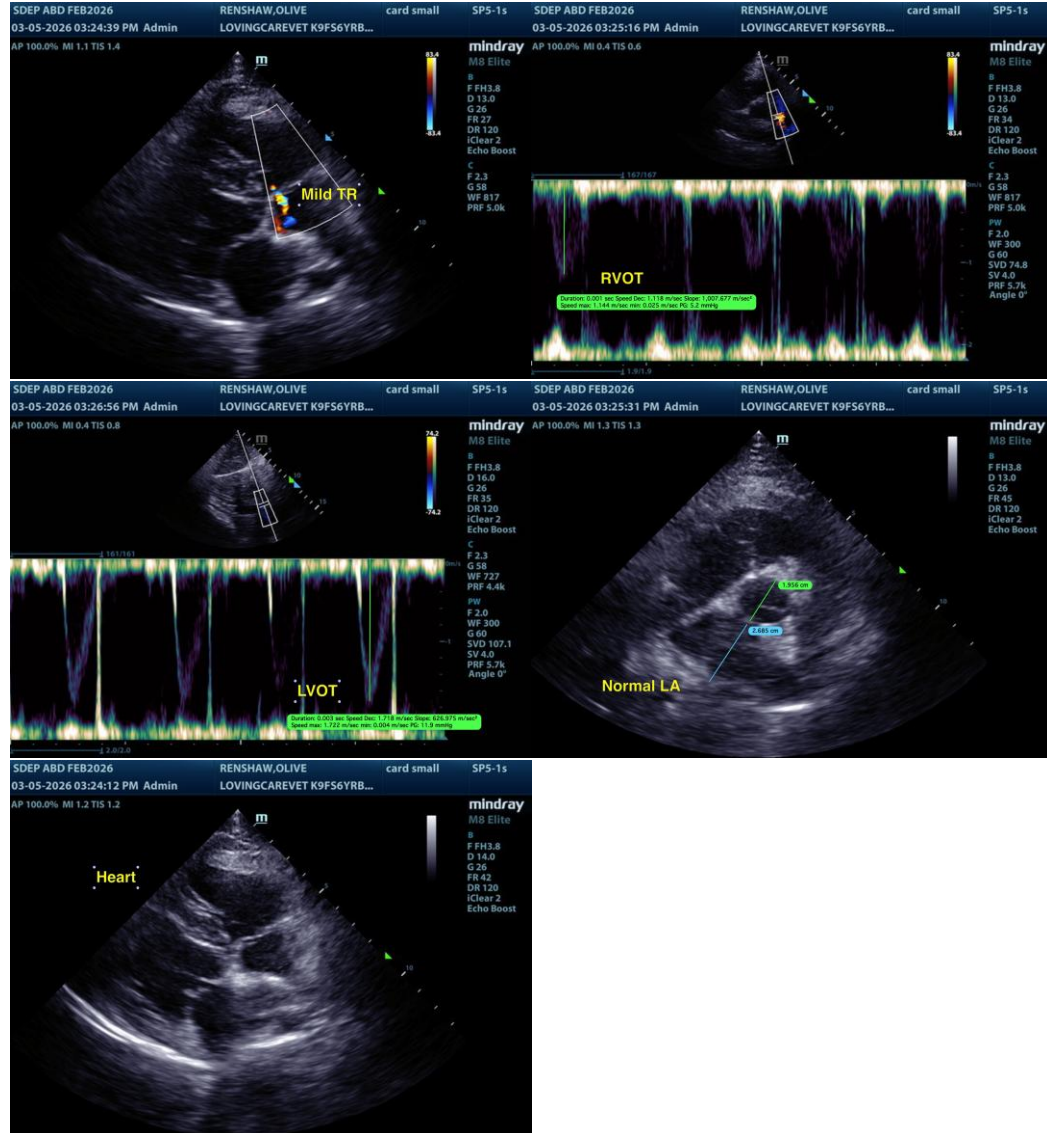
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
info@sonopath.com