



PATIENT

Winston Kightlinger

PRESENTING CLINICAL SIGNS

History: Progressive chronic cough over past 1.5 years. Has 2/6 systolic murmur.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

King Charles Spaniel

SEX

Neutered male

AGE

10 years

The **left atrium** was mildly enlarged primarily in the LA max position. 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. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** insufficiency was noted. Moderate filling of the right atrium by the tricuspid valve was evident. 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.

WEIGHT

20 lbs

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base;)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT		3.5	1.3	1.4	33	64	0.27
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	99	1.32	0.89	20 lbs	3.4	2.51	

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Doverspike

HOSPITAL NAME

Franklin ACI

ULTRASONOGRAPHIC FINDINGS

REFERRING VET

Dr. Doverspike

Mitral and tricuspid insufficiency with early pulmonary hypertension.

Early Stage B2 valvular disease.

INVOICE

76288

DATE

7/27/23



INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If left atrial enlargement was noted on radiographs then Pimobendan can be considered. Blood pressure measurements are essential given the aortic insufficiency. It is doubtful that the cough is cardiogenic in this patient at this time. However, this can change at any moment. The left atrial size was barely excessive. Pimobendan can be justified if vertebral heart score is excessive at 0.3 mg/kg b.i.d.

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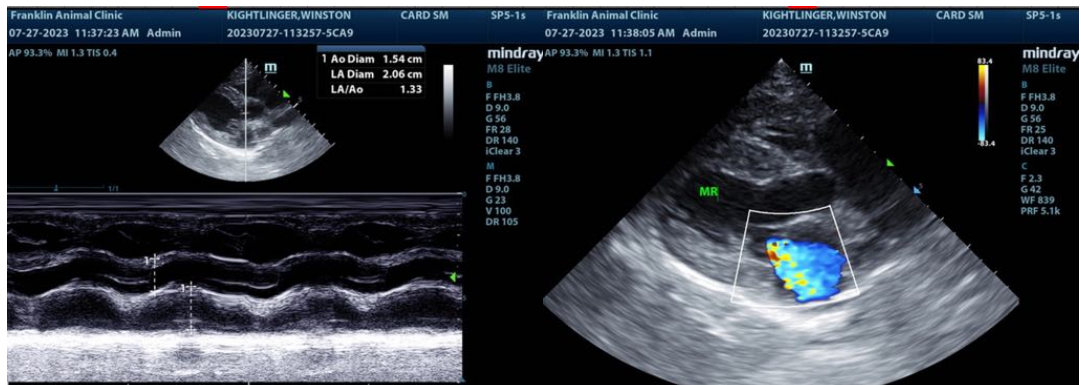
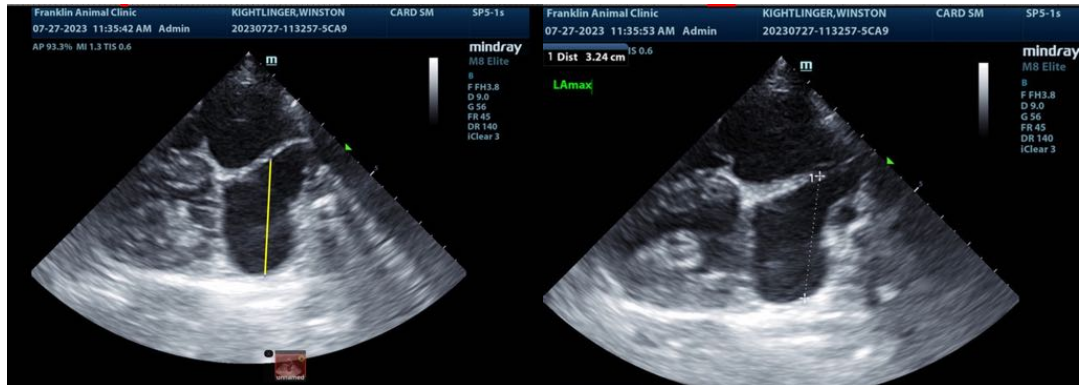
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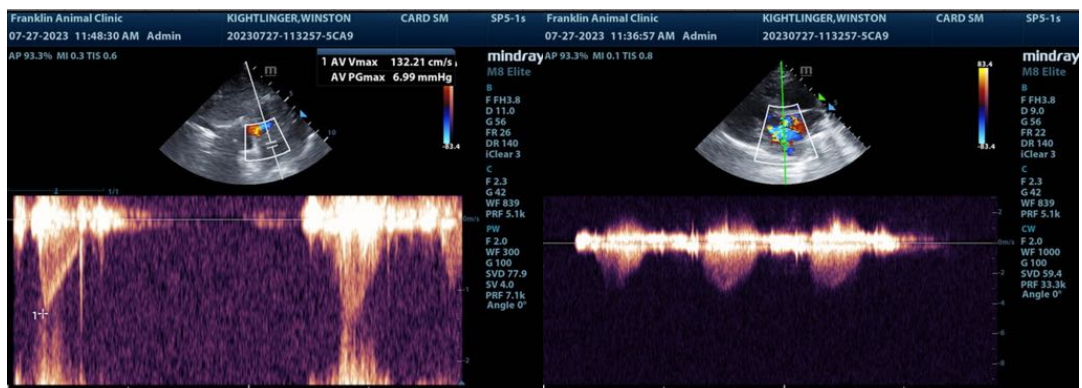
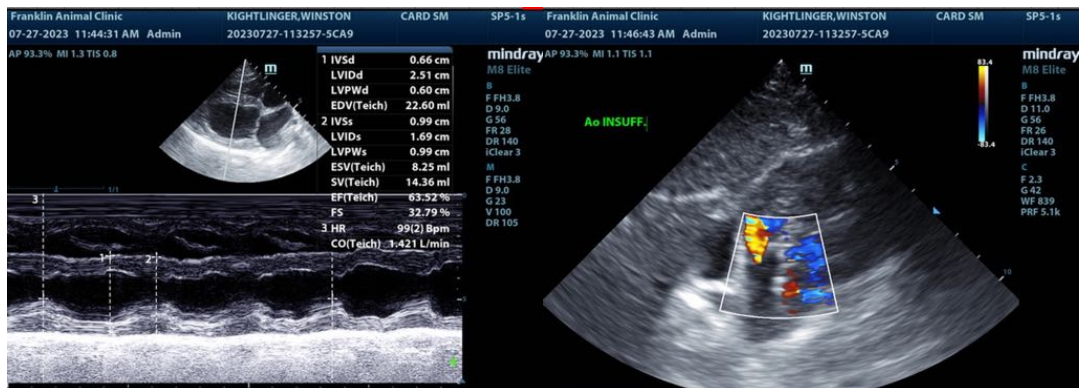
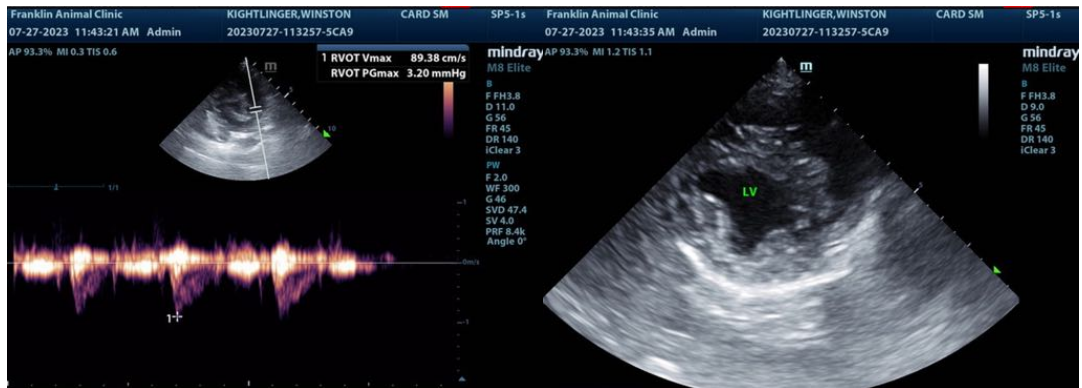
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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, Cert. IVUSS, CEO of SonoPath.com
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