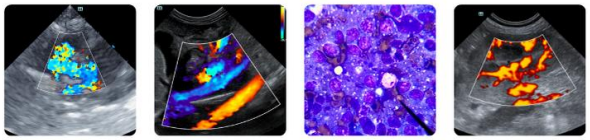

PATIENT

Tug Fraser

SPECIES

Canine

BREED

Boxer

SEX

Male Neutered

AGE

4 years

WEIGHT

70lbs

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY

Karen Ebersole, DVM, DABVP

HOSPITAL NAME

Scanvet

REFERRING VET

Dr. Moore

INVOICE

45652

DATE

11/4/25

PRESENTING CLINICAL SIGNS

History: Breed screen echo. Asymptomatic. Recent bout of vomiting with blood, suspect gastritis and chronic pancreatitis. No murmur. Labs: elevated Amylase/Lipase and mild eosinophilia. AUS today - Gastritis (moderate) and suspect low-grade pancreatitis.

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 mitral regurgitation seen. Normal left atrial dimension. Normal LV diameter with normal myocardial function. The tricuspid valve appears subjectively normal with trivial tricuspid regurgitation. Normal velocity. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and mildly elevated aortic outflow velocities. No AI or PI. No pericardial or pleural effusion noted. No cardiac tumors identified.

CARDIAC CHART

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	NM	1.3	32	60	0.3
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	BELOW	BELOW	BELOW	BELOW
PATIENT	130	2.0	1.5	31.8	3.0	4.3	2.9
*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)

Adapted from June Boon, Veterinary Echocardiography, 1998
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435
Hansson et al, Vet Rad and Ultrasound 2002
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overtly normal cardiac structure and function. No evidence of right heart enlargement, LV dysfunction or chamber dilation at this time. No significant valve leaks are seen and flow through the great vessels is normal.

Given the signalment, there is still risk for development of ARVC or DCM as this dog ages, and annual screening through echocardiography and holter monitor is recommended. A genetic test is available through NC State and may also be reasonable to screen for the risk of development of ARCVC. Finally, given the recent findings on possible causation of nontraditional diets and DCM

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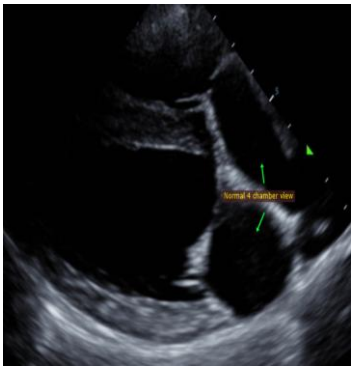
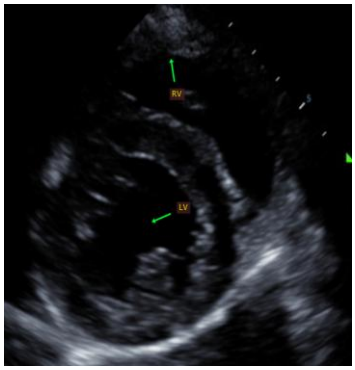
in dogs predisposed to the disease, I would not advise a nontraditional diet in this patient due to potential negative long-term effects.

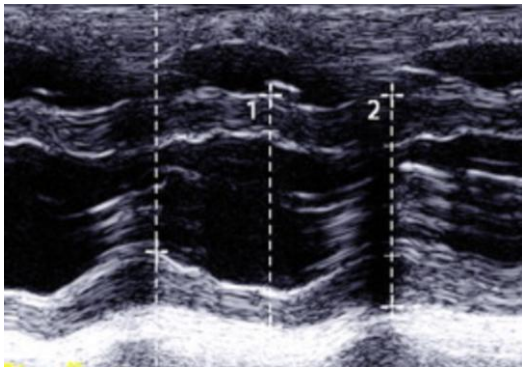
No medications are indicated; however, omega fatty acid supplementation may be of some long-term benefit in dogs predisposed to arrhythmias. Monitor for development of a heart murmur, cough, labored breathing, exercise intolerance or collapse episodes.

Recommend continued annual monitoring through echocardiography, holter/ECG, and/or NT-ProBNP screening, sooner if any development of clinical signs.

IMAGES







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.

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.

Maggie Machen Lamy, DVM
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