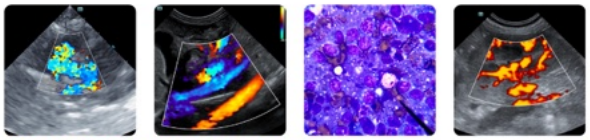

PATIENT

Roxie Frank

SPECIES

Canine

BREED

Boxer Cross

SEX

Spayed Female

AGE

11 years

WEIGHT

49 lbs

INTERPRETED BY

Eric Lindquist, DMV, DABVP (CFM), Cert. IVUSS, CEO of SonoPath.com

IMAGING PERFORMED BY

Dr. Pfannenstiel

HOSPITAL NAME

Mill Brook Animal Clinic VBF

REFERRING VET

Dr. Pfannenstiel

INVOICE

71495

DATE

2/11/26

PRESENTING CLINICAL SIGNS

- Came in for wellness, noted an arrhythmia, recc echo as part of a work up. Still has an arrhythmia today. Trying to get her in for a dental. Hypertensive on Doppler 137, 142, 147 but VERY chill on meds, CBC: A mildly elevated MCHC was noted at 38.1 g/dL (reference 32.3-38.0 g/dL). Chemistry: Mild elevations were noted in ALT at 123 U/L (reference 18-121 U/L) and ALP at 183 U/L (reference 5-160 U/L). Endocrinology: Results were consistent with hypothyroidism. Total T4 was low at 0.6 ug/dL (reference 1.0-4.0 ug/dL) and Free T4 was low at 0.5 ng/dL (reference 0.6-3.7 ng/dL). The cTSH was within normal limits at 0.30 ng/mL. -> started levothyroxine a 4 weeks ago Urinalysis: The specific gravity was 1.038. Non-crystalline debris was present. Serology: N Heartworm antigen and antibodies to Ehrlichia spp., Anaplasma spp., and Borrelia burgdorferi. Parasitology: Fecal analysis was negative for ova, parasites, and common worm antigens.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 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. 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** valvular assessment demonstrated adequate linear morphology and kinesis. 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. Occasional arrhythmia was noted in this patient. The hepatic veins were not dilated.

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO	LA/AO (Heart Base)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.1	1.5	30	70	0.2
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		1.0	0.7	49 lbs		3.4	

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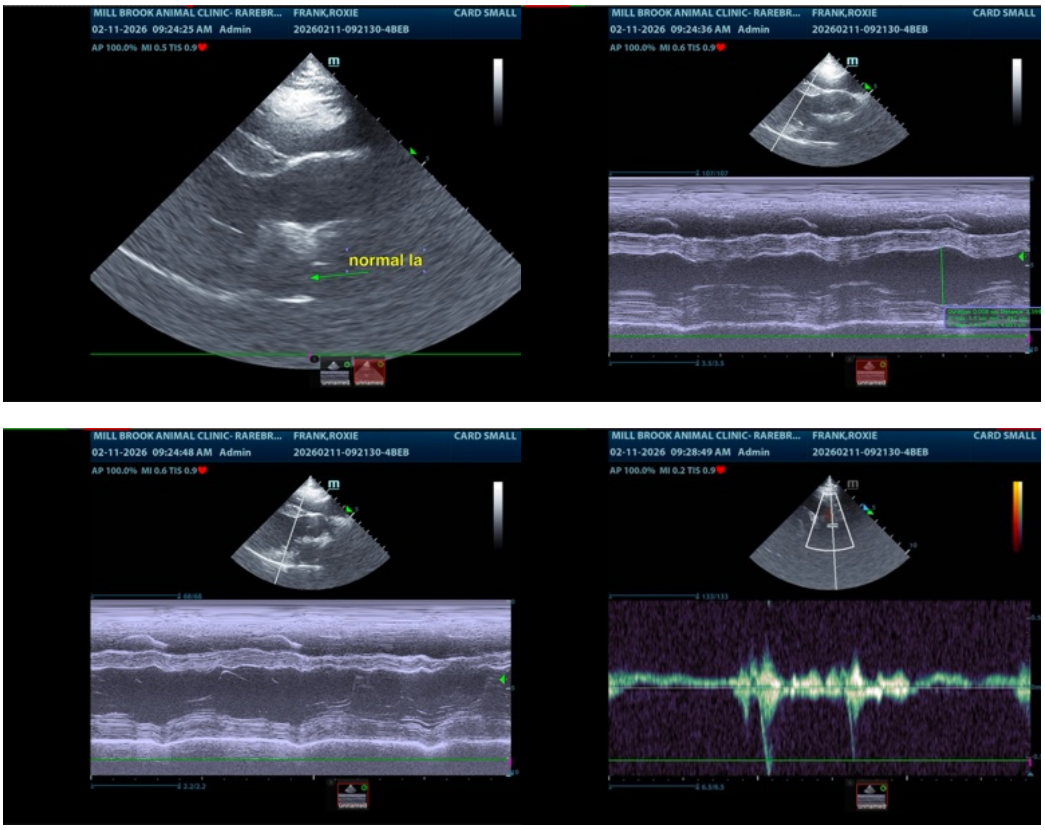
ULTRASONOGRAPHIC FINDINGS

Normal echocardiogram, no evidence of volume overload or structural disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Structure, function and volume appeared to be normal, yet given the breed arrhythmogenic disease should be monitored. A Holter monitor would be ideal in this patient and can be obtained from our office with cardiologist review.



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 (CFM), Cert. IVUSS, CEO of SonoPath.com

info@SonoPath.com