



PATIENT

Milo Castro

SPECIES

Canine

BREED

Norwegian Elkhound

SEX

Neutered Male

AGE

13 Years 6 Months

WEIGHT

54.8 Pounds

INTERPRETED BY

Eric Lindquist, DMV,
DABVP (Canine &
Feline), Cert. IVUSS

IMAGING

PERFORMED BY

Carla

HOSPITAL NAME

ACC Flanders

REFERRING VET

Dr. Hargadon

INVOICE

37365

DATE

6/5/26

PRESENTING CLINICAL SIGNS

History: Recheck Echo, 12/19/2025: Stage B1 valvular disease, Grade III/VI systolic murmur, Medications: Torbugesic 10mg/ml: Administered 0.8ml IV, Midazolam 5mg/ml: Administered 1.0 ml IV for echo, Abnormal PE/Chem/CBC/UA Results: 6/5/26: BP avg 112 systolic 3/20/26: SDMA = 15

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	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	--	--	1.3	1.3	--	--	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (lbs)	LAD LA MAX 4 Chamber	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	60	1.50	90	54.8	3.5	3.4	--

**Some values are slightly increased owing to sedation.

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Moderate mitral insufficiency was noted on color flow assessment, regarding filling of the left atrium. 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 or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** 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. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.



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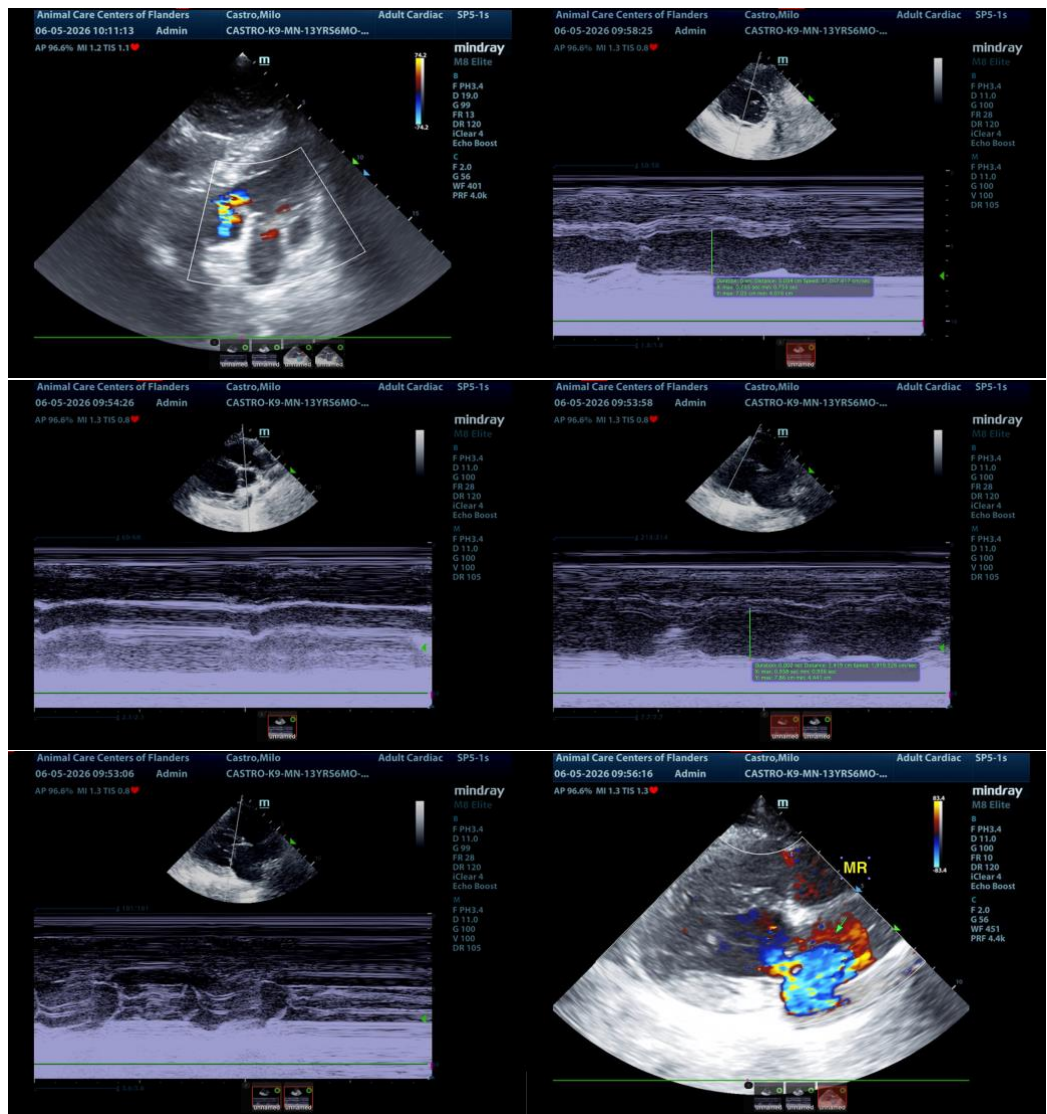
6/5/26

ULTRASONOGRAPHIC FINDINGS

- Stable stage B-1 valvular disease

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No adjustments to the current protocol are necessary. Recheck echo in 6 months, earlier if murmur grade increases.





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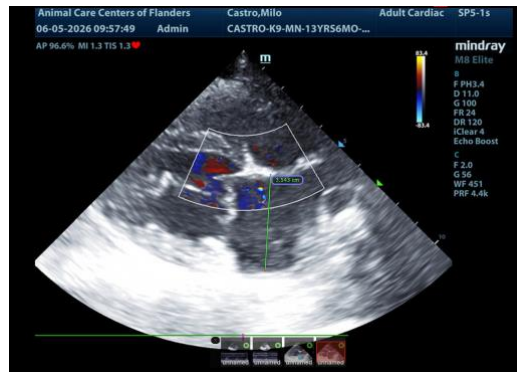
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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(CFM), Cert. IVUSS,
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