



## PATIENT

Thunder Schoonover

## SPECIES

Canine

## BREED

Min Pin

## SEX

Neutered Male

## AGE

10 Years

## WEIGHT

31.6 Pounds

## PRESENTING CLINICAL SIGNS

History: New heart murmur heard

Abnormal PE/Chem/CBC/UA Results: Chemistry WNL

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	<1.3	28-40	40-100	<0.6
PATIENT	--	--	1.5	1.9	48	81	0.14
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				
PATIENT	--	--	1.00	--	4.1	2.84	--

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Guhrun Gunther

## HOSPITAL NAME

New Frontier AMC

## REFERRING VET

Guhrun Gunther

## INVOICE

17702

## DATE

10/14/22

## Cardiac Presentation

The echocardiogram for this patient presented excessive **left atrial size** expressed both in the LA/AO and LA max measurements. Moderate to complete filling of the left atrium was noted on mitral doppler. Doppler indicated measurable insufficiency. 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.

## ULTRASONOGRAPHIC FINDINGS

- Early stage B-2 valvular disease
- Mild left atrial enlargement

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



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I recommend initiating Pimobendan at 0.3 mg/kg BID. Blood pressure measurements are warranted, if systolic pressure is > 160, then ace-inhibitor is indicated. Recheck echo in 6 months or earlier if murmur grade increased or clinical signs initiate.

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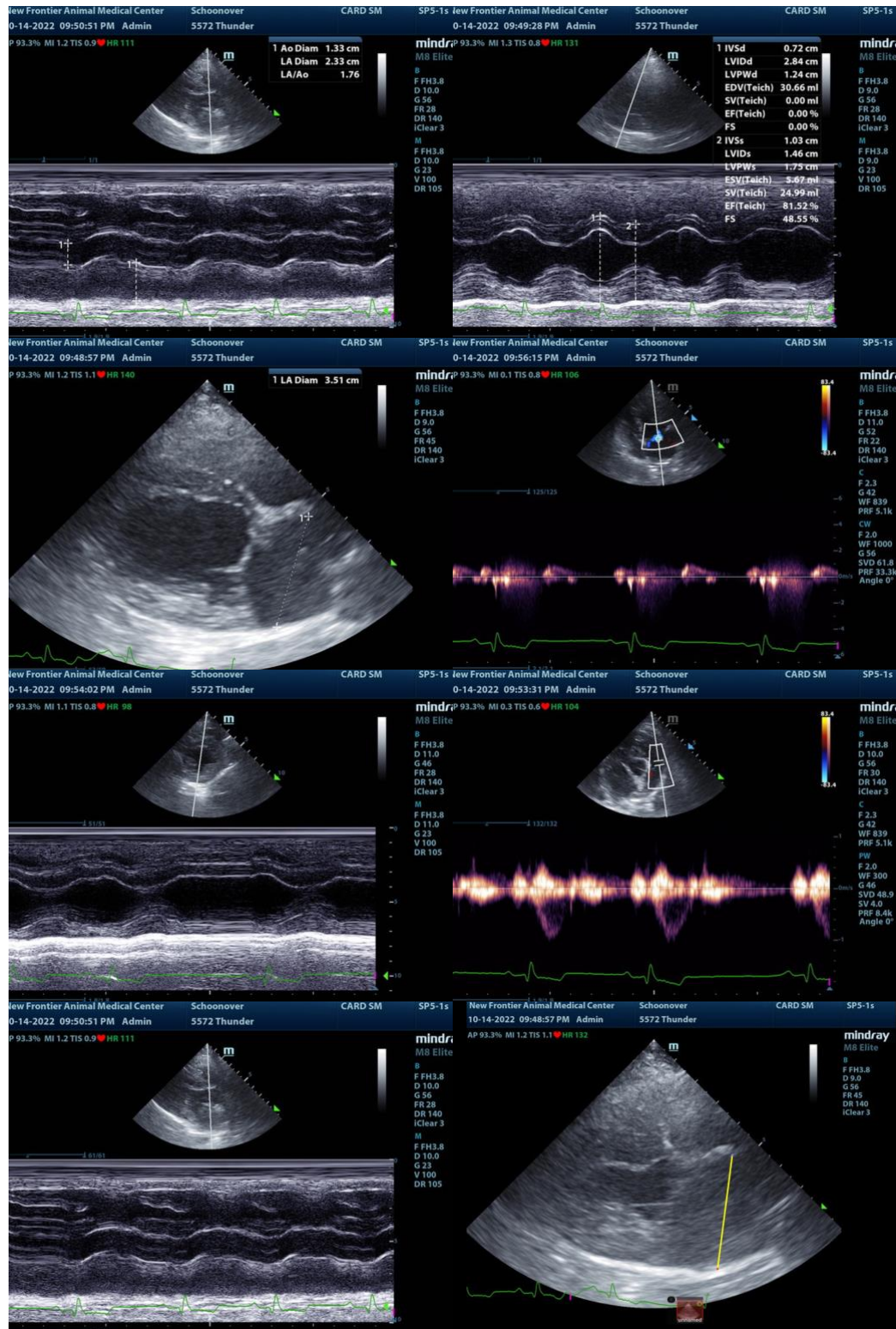
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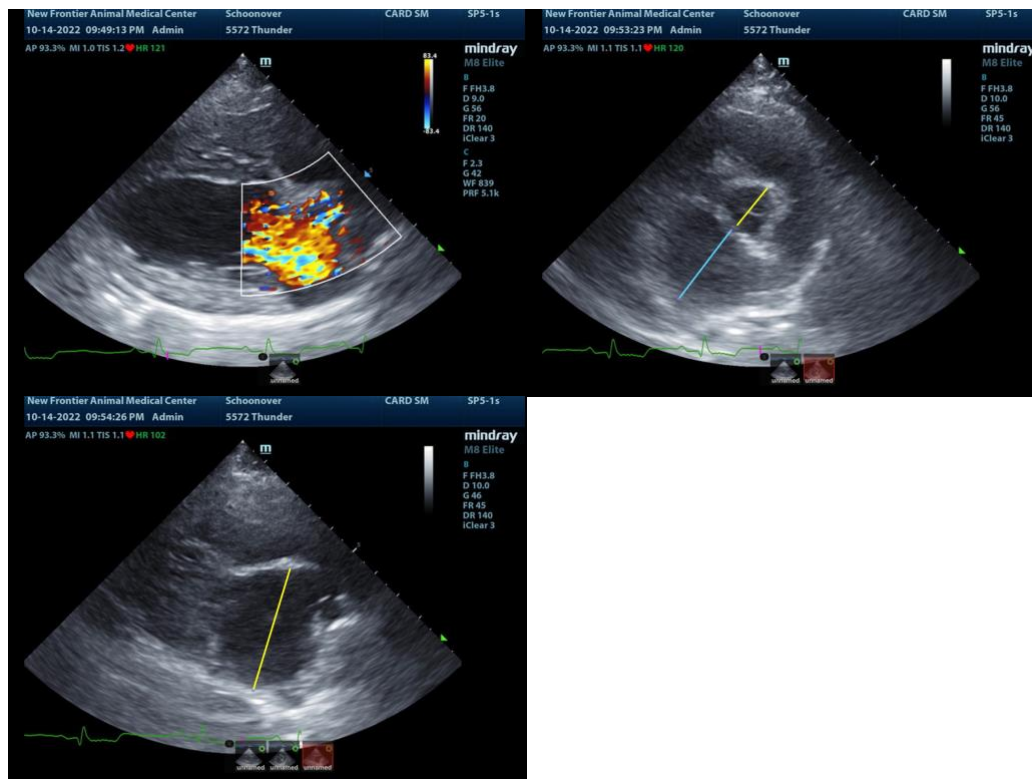
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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