



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Lucy Smith  
**History:** Diagnosed at another hospital with a splenic mass and possible cardiomegaly on thoracic radiographs. No heart murmur. No cardiac symptoms.  
**Abnormal PE/Chem/CBC/UA Results:** Spleen - cavitated mass in tail of spleen

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Australian Shepherd

**SEX**

Spayed Female

**AGE**

9 years

**WEIGHT**

34 lbs

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/aortic 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 is noted.

**INTERPRETED BY**

Eric Lindquist, DMV  
 DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier AMC

**REFERRING VET**

Dr. Gunther

**INVOICE**

31248

**DATE**

6/27/22

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			NM	1.4	45		NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LA (2D short axis Base view)	LVIDd (Avg; 2D and m-mode short axis)	LVIDs (Avg; 2D and m-mode short axis)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	Variable	1.3	0.9	34 lbs	3.2 max	3.3	

**Spleen**

The spleen revealed mixed, hypoechoic, microcystic nodule measuring 2.7 x 2.3 cm at the midbody. This mass is at risk for rupture. The remainder of the abdomen was not visualized.



**PATIENT**                      **ULTRASONOGRAPHIC FINDINGS**

Lucy Smith                      Splenic mass.  
    Normal echocardiogram.

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is no evidence of metastatic disease. I recommend full abdominal sonogram in this patient to ensure no evidence of metastatic disease on three view thoracic radiographs followed by splenectomy.

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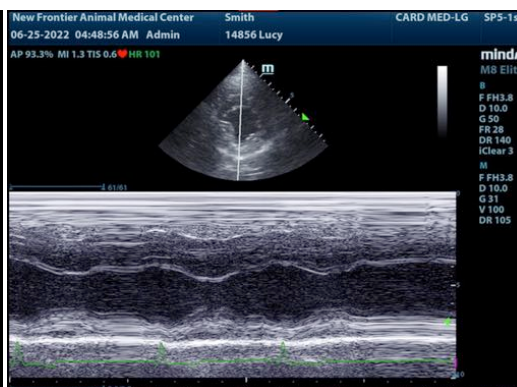
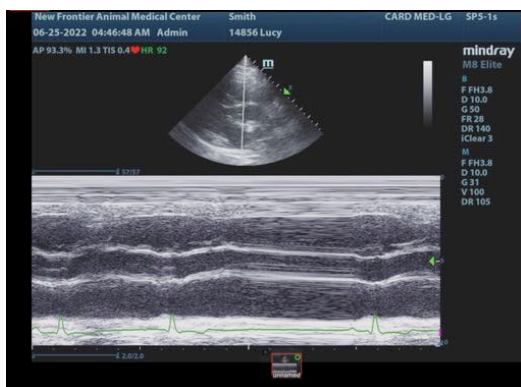
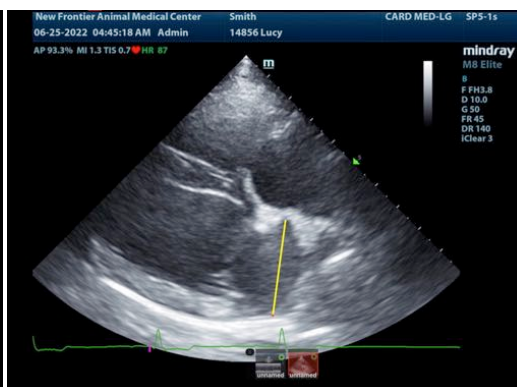
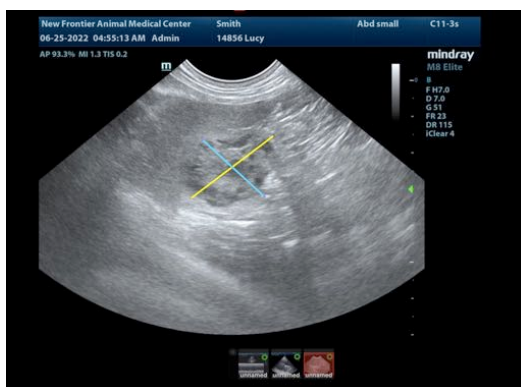
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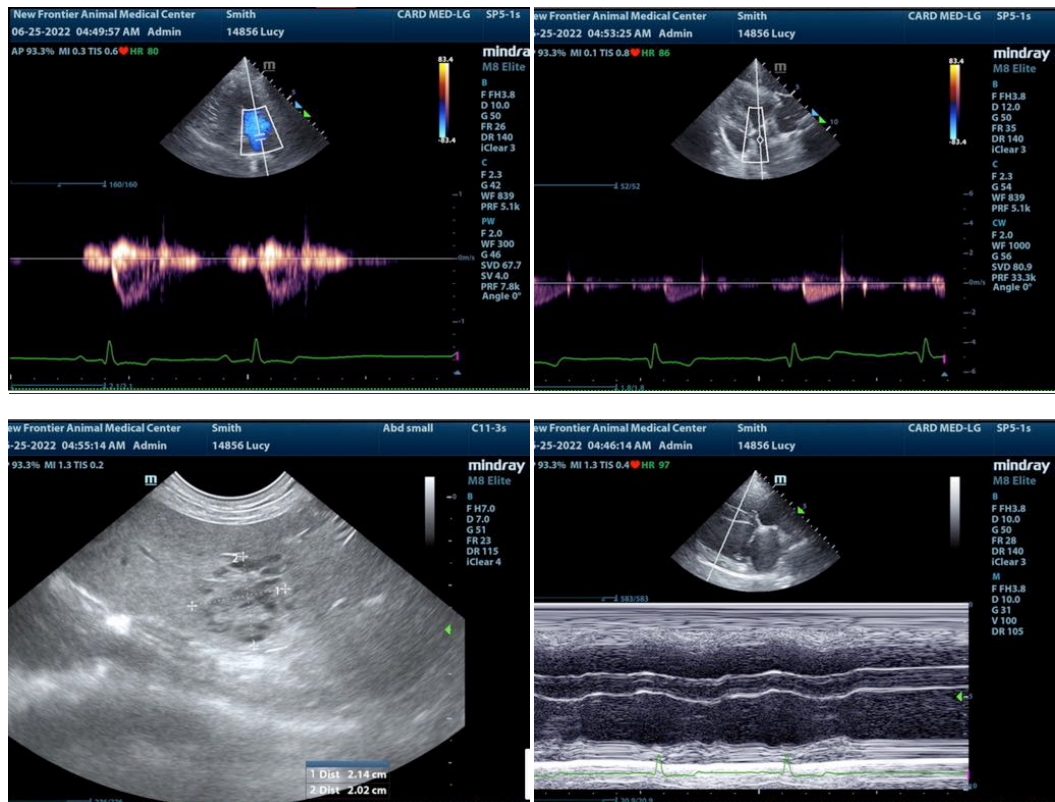
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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