

**PATIENT PRESENTING CLINICAL SIGNS**

Pacey VanWinkle History: Heart murmur grade IV/VI

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

15 years

The echocardiogram in this patient demonstrated slightly enlarged **left atrial** size in the LA max position; however, the LA in the other two positions were normal. Minor **mitral** valve insufficiency was noted in this patient. Minor, concentric **left ventricular** hypertrophy was noted with **myocardial** remodeling and prominent papillary muscle. **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 and angles 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 and kinetics. 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 or extra cardiac pathology in the visible planes. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

**WEIGHT**

16.3 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jessica Miller, RDMS

**HOSPITAL NAME**

Loving Care VH

**REFERRING VET**

Dr. Steele

FELINE CARDIAC PARAMETERS	BODY WEIGHT	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT	16.3 lbs	166	0.56	1.73	0.69	52	85
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
PATIENT	1.39	1.37	1.7	NM	0.63	NM	

Adapted from June Boon, Veterinary Echocardiography, 1998  
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

**ULTRASONOGRAPHIC FINDINGS**

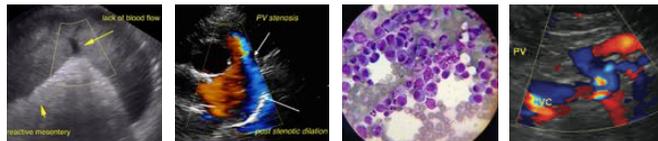
**INVOICE**

91070

**DATE**

8/9/21

Papillary hypertrophy and minor mitral insufficiency.  
Slightly enlarged LA max, yet normal in all other parameters.



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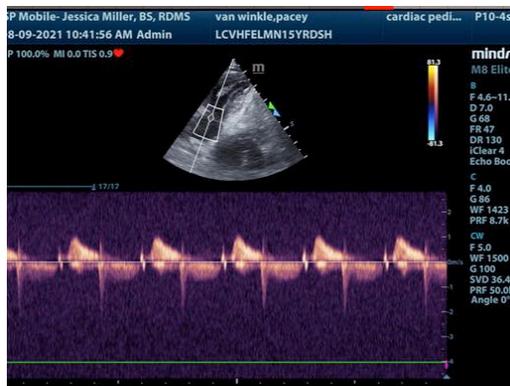
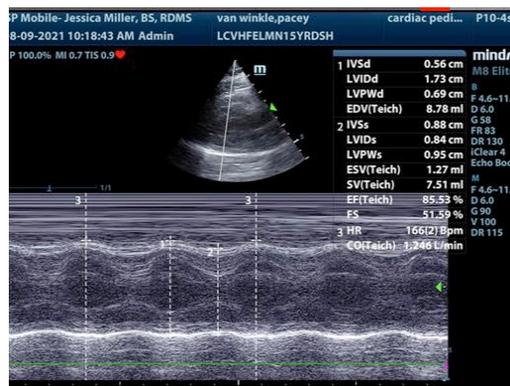
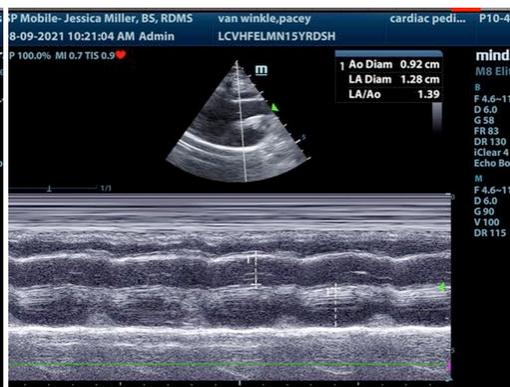
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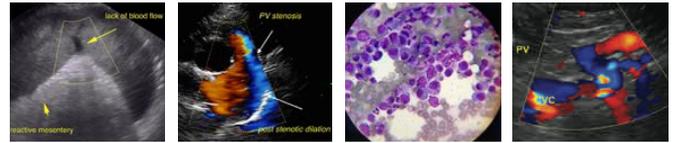
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There was no evidence of volume overload. There is no overt contraindication to anesthetic procedure if necessary. If anesthesia is to be performed then Torbutrol pre med, Propofol induction and Isoflurane maintenance is recommended. There was no evidence of volume overload. No treatment is recommended at this time. The LA max measurement is slightly enlarged, yet normal in all other parameters. I do not recommend therapy at this time. Recheck echocardiogram is recommended in a year or earlier if any increased respiratory rate or exercise intolerance occurs.





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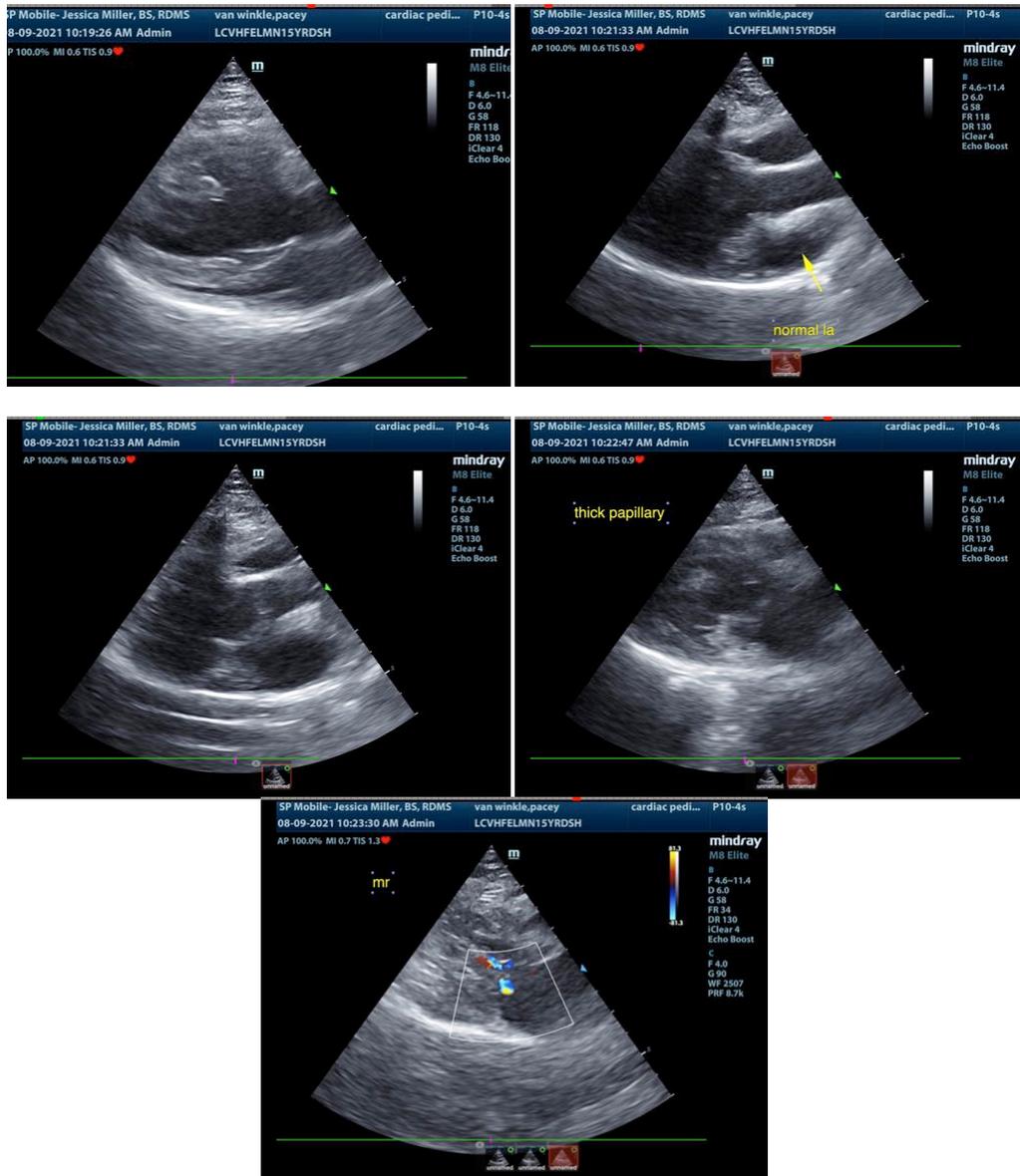
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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