



**PATIENT PRESENTING CLINICAL SIGNS**

Sage Naumoff

Sage has a history of a grade 3/6 heart murmur and an arrhythmia. She has been doing well clinically. An echo was performed June 2021 with Animal Sounds to evaluate the above changes. No structural changes to the heart were found, and VPCs were noted with the ECG. A follow-up echo was recommended at the time to evaluate for any disease progression. BP-120, 117,122, 119 Lowest: 117 Highest: 122 Average: 118 mm Hg Current Medications Methimazole

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Spayed Female

**AGE**

13 years

**WEIGHT**

9.5 lbs

**INTERPRETED BY**

Eric Lindquist, DMV, DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

West Eugene AH

**REFERRING VET**

Dr. Larsen

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Trivial mitral valve insufficiency is noted in this patient. The **left ventricle** presented normal septal and free wall thicknesses. However, the internal diameter was subnormal. Mild myocardial remodeling was noted. This is expected for this age patient especially given the hyperthyroid history. The **left atrial** size was normal to subnormal. 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.

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	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		NM	0.5	1.0	0.54	45	90
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	1.05	1.16			1.2	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**

Normal echocardiogram.

**DATE**

1/17/22

Invoice  
95298



**PATIENT**

Sage Naumoff

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Spayed Female

**AGE**

13 years

**WEIGHT**

9.5 lbs

**INTERPRETED BY**

Eric Lindquist, DMV,  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

West Eugene AH

**REFERRING VET**

Dr. Larsen

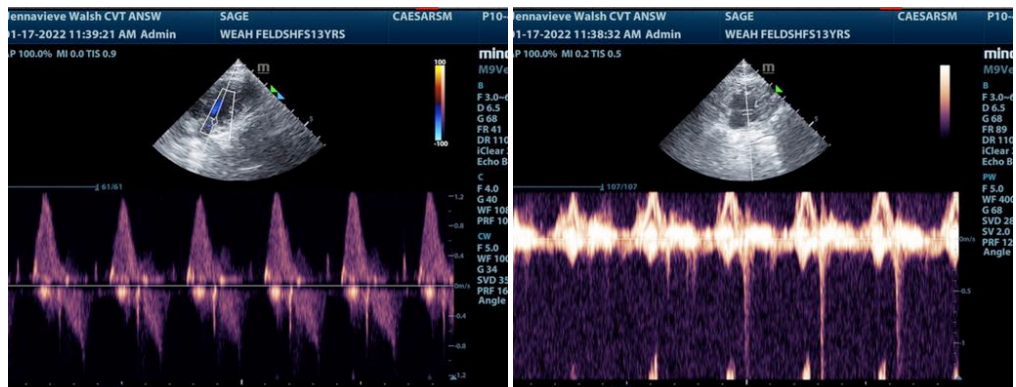
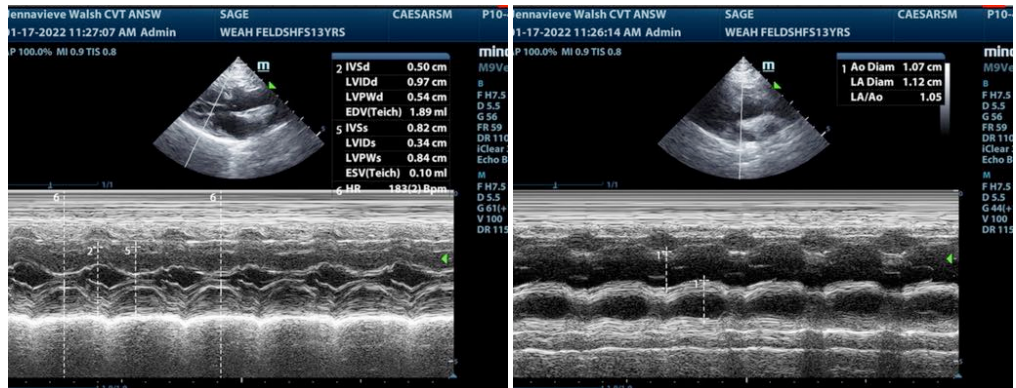
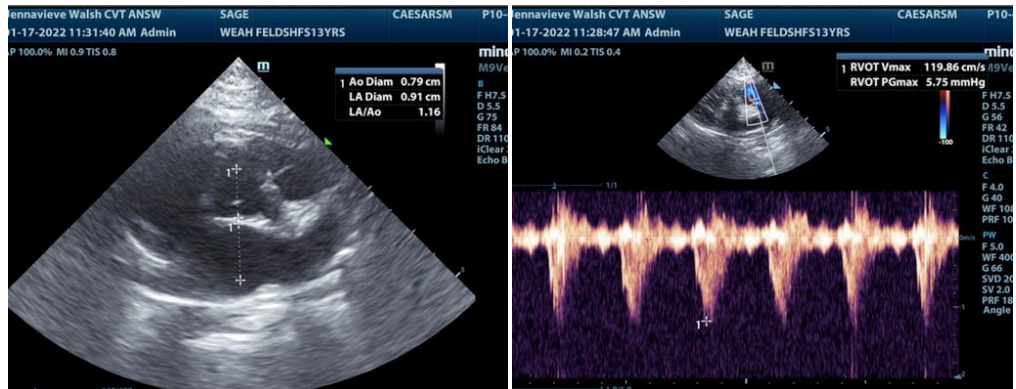
**DATE**

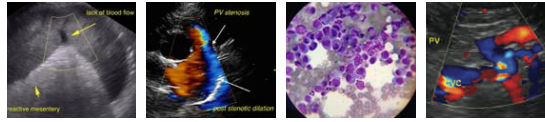
1/17/22

**Invoice**  
95298

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The patient appears subjectively subnormal in volume of volume contracted. Hydrations status should be evaluated in this patient. No cardiac medications are recommended. Assessment for systemic disease that would be causing potential volume contraction/dehydration is indicated. Anti-arrhythmic therapy would be based on EKG results.





**PATIENT**

Sage Naumoff

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Spayed Female

**AGE**

13 years

**WEIGHT**

9.5 lbs

**INTERPRETED BY**

Eric Lindquist, DMV,  
DABVP, Cert. IVUSS

**IMAGING  
PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

West Eugene AH

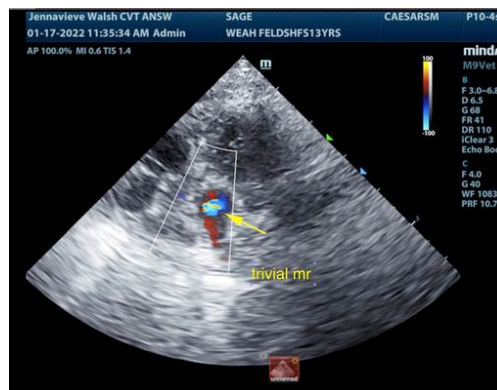
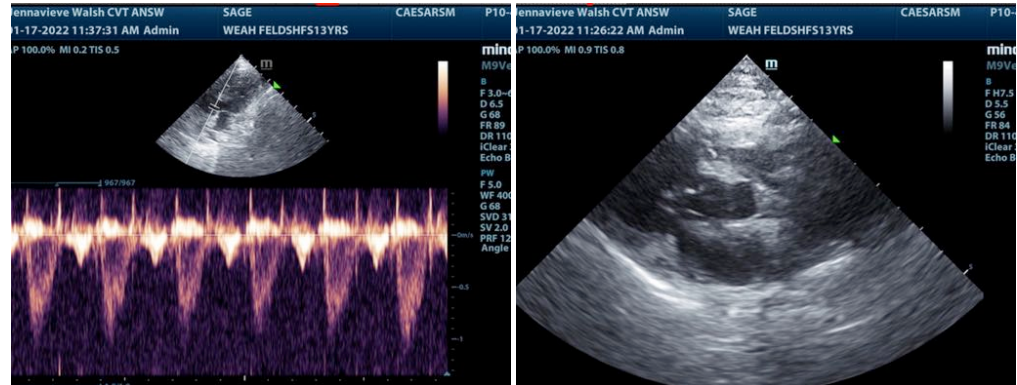
**REFERRING VET**

Dr. Larsen

**DATE**

1/17/22

**Invoice**  
95298



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

Eric.Lindquist@SonoPath.com