



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Yuki Ramirez  
**SPECIES** Canine  
**BREED** Japanese Chin  
**SEX** Spayed female  
**AGE** 11 years  
**WEIGHT** 11.3 lbs

History: Heart murmur heard at last visit cardiomegaly with VHS 11.5 seen on rads Was started on heart meds (after radiographs) in February 2023 Meds: Vetmedin 1.25 mg PO BID Enalapril 1.25 mg PO BID Patient is asymptomatic (was coughing at one point but that has resolved)  
 Abnormal PE/Chem/CBC/UA Results: no recent bloodwork

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

The echocardiogram in this patient demonstrated enlarged **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. Prolapse of the anterior mitral valve leaflet was noted. Doppler indicated measurable insufficiency. The **left ventricle** presented normal 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. The patient was tachycardic.

**INTERPRETED BY**

Eric Lindquist, DMV  
 DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier Animal  
 Medical Center

**REFERRING VET**

Dr. Gunther

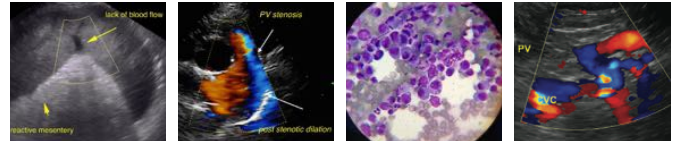
**INVOICE**

43917

**DATE**

4/20/23

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base;)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	5.0		1.8	2.15	44	76	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	BELOW	BELOW	BELOW	BELOW
PATIENT		1.0		11.3 lbs	3.1	2.95	



**PATIENT**

Yuki Ramirez

**SPECIES**

Canine

**BREED**

Japanese Chin

**SEX**

Spayed female

**AGE**

11 years

**WEIGHT**

11.3 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier Animal  
Medical Center

**REFERRING VET**

Dr. Gunther

**INVOICE**

43917

**DATE**

4/20/23

**ULTRASONOGRAPHIC FINDINGS**

Mitral insufficiency.

Mild left atrial enlargement.

Advanced stage B2 valvular disease/B2+

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

I recommend adding Spironolactone at 1-2 mg/kg b.i.d. Concurrent bronchial disease may be playing a role in this patient. Primary respiratory disease may be playing a role. Blood pressure measurements are warranted. EKG is indicated given the tachycardia.





**PATIENT**

Yuki Ramirez

**SPECIES**

Canine

**BREED**

Japanese Chin

**SEX**

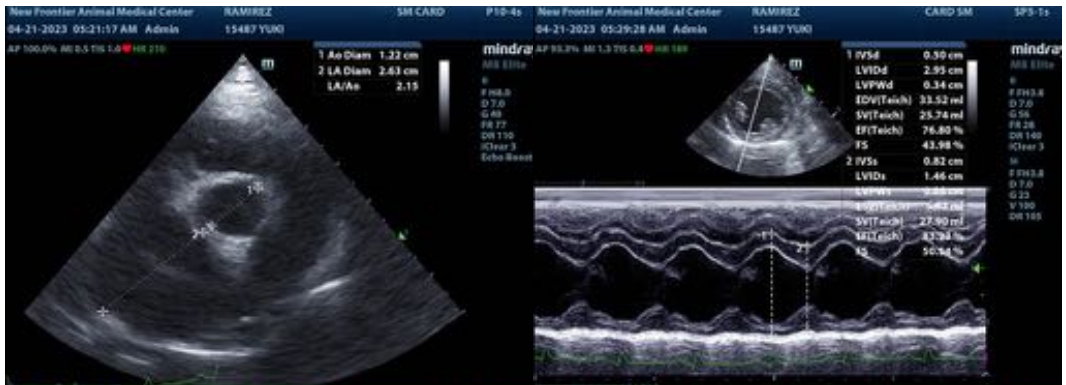
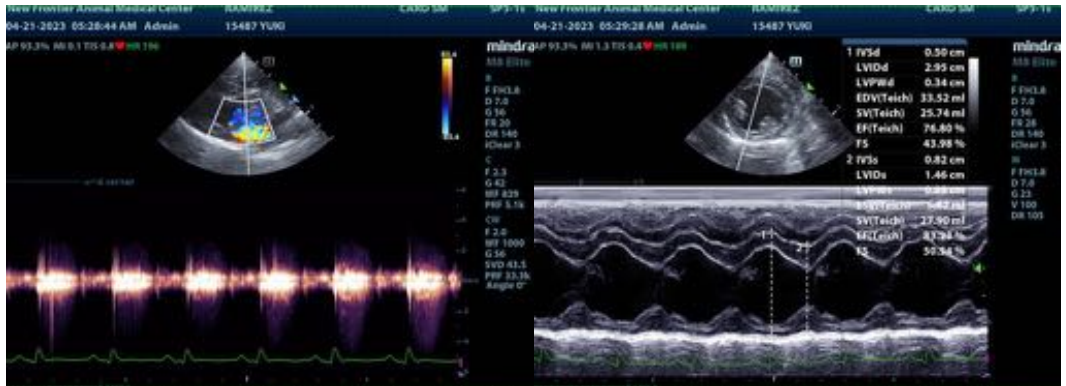
Spayed female

**AGE**

11 years

**WEIGHT**

11.3 lbs



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, Cert. IVUSS, CEO of SonoPath.com  
info@SonoPath.com

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier Animal  
Medical Center

**REFERRING VET**

Dr. Gunther

**INVOICE**

43917

**DATE**

4/20/23