



**PATIENT**

Siete Nieves

**SPECIES**

Canine

**BREED**

Maltese

**SEX**

Intact Male

**AGE**

11 Years

**WEIGHT**

10 Pounds

**INTERPRETED BY**

Sara Brethel, DVM,  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Dr. Gabriel Ferrer, DVM

**HOSPITAL NAME**

Pulse Pet Ultrasound  
Services

**REFERRING VET**

Dra. Diamaris Trinidad

**INVOICE**

35112

**DATE**

12/29/25

**PRESENTING CLINICAL SIGNS**

History: Presented as a referral for an echocardiogram to evaluate heart murmur, coughing and cardiomegaly. Pt was diagnosed with a heart murmur in July 2025. Pt is currently taking furosemide and Temaril P and O mentioned that cough has improve with medications.

Abnormal PE/Chem/CBC/UA Results: PE: grade 3/6 systolic HM Radiographs attached as supporting documents.

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	6.03	2.9	NM	1.66	52	--	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX 4 Chamber	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	--	0.79	0.65	4.54	2.6	2.5	1.2

**Cardiac Presentation**

The mitral valve leaflets are mildly thickened with mild mitral regurgitation posteriorly directed. There is no prolapse of the mitral valve leaflet. The left atrial size is mildly increased. Left ventricular internal dimensions during diastole are within normal limits and systolic function is preserved in the face of mitral regurgitation. There is normal right atrial size with mild tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension based upon tricuspid regurgitant velocities. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonic valves have normal morphology and the corresponding outflow velocities are within normal limits. There is no pulmonic insufficiency. There is mild aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

**ULTRASONOGRAPHIC FINDINGS**

- Degenerative valve disease, ACVIM stage B-2
- Mild left atrial enlargement



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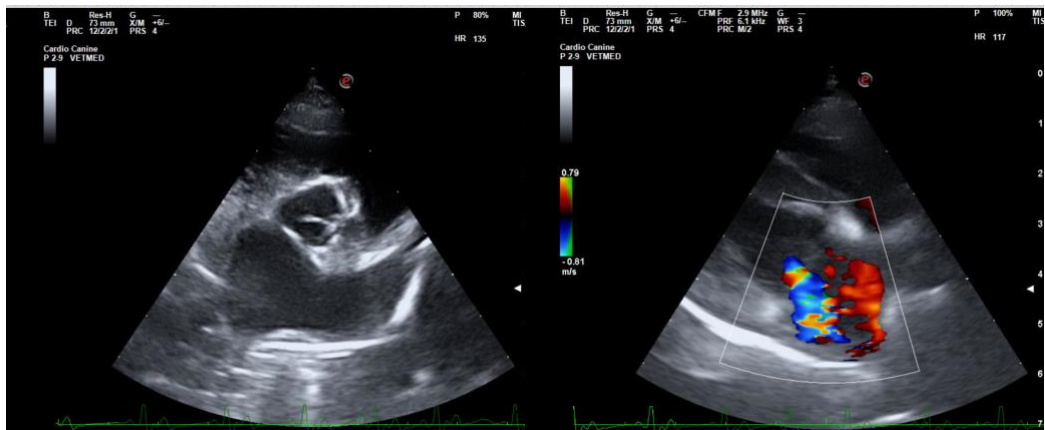
- Mild degeneration of the tricuspid valve and aortic valve
- No evidence of significant pulmonary hypertension

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient does have mild left atrial enlargement, and it's recommended to start pimobendan at a dose of 0.27 - 0.32 mg/kg twice daily. If there is no history of respiratory distress, then diuretic therapy is not recommended, and I recommend stopping furosemide therapy. Furosemide is also a mild anti-inflammatory and can often help with coughing. That, in addition to the steroid, likely explains the improvement with the cough. Recommend having the client limit any airway irritants at home, i.e., scented candles, aerosols, diffusers, incense, etc. Using a humidifier at this time of year can also be helpful with coughing. If a cough suppressant is needed long term, preferences include hydrocodone versus Lomotil, at a dose of 0.2 mg twice daily.

With the mild left atrial enlargement, especially taking the patient off of furosemide, recommend close monitoring of breathing rates. The client should start monitoring respiratory rate and effort at home if not already doing so. The resting respiratory rate should be < 35-40 breathes/minute when the patient is resting or sleeping. If the breathing rates are increasing, then chest radiographs are recommended.

The significance of the AI is unknown, recommend obtaining a blood pressure once available. There can be degenerative changes to the aortic valve as well. Recheck echo in 4-6 months, sooner if the patient's cardiovascular clinical signs are worsening.



**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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