



**PATIENT**

Guasi Fernandez

**SPECIES**

Canine

**BREED**

Mix

**SEX**

Male Neutered

**AGE**

11 years

**WEIGHT**

31.6lbs

**PRESENTING CLINICAL SIGNS**

History: Grade 3/6 heart murmur. History of a cough for 4 years, but for a week the cough has worsened and more recurrent especially at nights and when laying down. History of collapsing trachea. -Current medications: Temaril-P, Furosemide, Pimobendan, Theophylline and antihistamines.

**RADIOGRAPHIC FINDINGS** \*NOTE: Images submitted for supplemental cardiac information only.

Normal cardiac silhouette. No obvious evidence of CHF. Increased soft tissue opacity at the heart base with dorsal deviation of the trachea.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with mild prolapse into the left atrial lumen. Mild eccentric mitral regurgitation with mild left atrial dilation. Normal MR velocity. Normal LV diameter with adequate myocardial function. The tricuspid valve appears normal with no tricuspid regurgitation. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Mildly elevated pulmonic outflow velocity. Normal aortic outflow velocity. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses are confirmed; however, an abnormal soft tissue lesion is suspected near the bifurcation of the pulmonary artery.

**CARDIAC CHART**

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

**IMAGING PERFORMED BY**

G. Ferrer, DVM

**HOSPITAL NAME**

Pulse: Pet Ultrasound Services

**REFERRING VET**

Dr. Berrera

**INVOICE**

45618

**DATE**

11/3/25

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	<1.6	28-40	40-100	<0.6
PATIENT	5.1	NA	NM	1.4	37	69	0.3
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	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	NM	0.8	2.2	14.3	2.6	2.8	1.7
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
Adapted from June Boon, Veterinary Echocardiography, 1998				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
Hansson et al, Vet Rad and Ultrasound 2002				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Chronic degenerative valve disease causing mild mitral regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. No concurrent issues such as systolic dysfunction or pulmonary hypertension are noted in this study.



## PATIENT

Guasi Fernandez

## SPECIES

Canine

## BREED

Mix

## SEX

Male Neutered

## AGE

11 years

## WEIGHT

31.6lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

G. Ferrer, DVM

## HOSPITAL NAME

Pulse: Pet Ultrasound  
Services

## REFERRING VET

Dr. Berrera

## INVOICE

45618

## DATE

11/3/25

Of some concern the radiographic appearance does suggest increased soft tissue in the cranial thorax. The only suspicion lesion seen here is a soft tissue opacity near the bifurcation of the pulmonary artery. This is not confirmed from multiple views; however, suspicion is high. The next step in this case is a Radiologist review of 3-view films and potentially a thoracic CT scan. If confirmed, this is the likely cause of the patient's cough.

In a dog with no significant left atrial enlargement, no cardiac medications are indicated and Pimobendan and Lasix can be safely discontinued. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1). Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

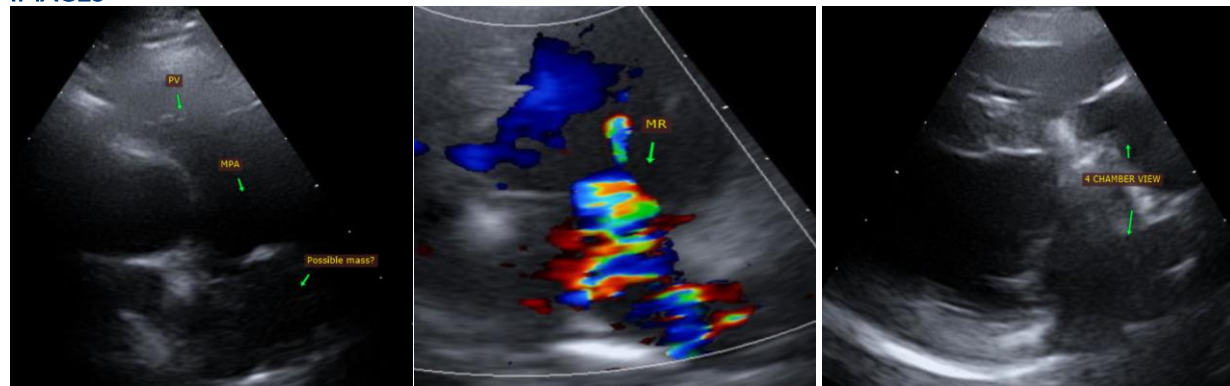
Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

## PLAN

Discontinue Lasix and Pimobendan. 3-view radiograph review by a Radiologist, thoracic CT scan, etc.

Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

## IMAGES



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. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

Maggie Machen Lamy, DVM  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com