



PATIENT PRESENTING CLINICAL SIGNS

Gaby Allie Molina Recheck echo, last one performed on 2/22/21. Patient presents for wheezing. Current meds: Lasix 12.5mgs/ml 1 ml BID, Pimobendan, Gabapentin, added 9/11/21; aminophylline, Clavamox. Abnormal PE/Chem/CBC/UA Results: BUN 68.

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Yorkie

SEX

Spayed Female

AGE

12 Years

WEIGHT

7 Pounds

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	5.4		2.0	2.2	52.7	85.5	0.24
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				
PATIENT	125	1.0	0.7		2.8	2.54	

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional

REFERRING VET

Dr.
Murphy/Giammanco

INVOICE

25372

DATE

9/13/21

Cardiac Presentation

The echocardiogram for this patient presented moderately excessive **left atrial size** expressed both in the LA/AO and LA max measurements. Mild to moderate deviation of the intraatrial septum towards the right atrium and indicative of elevated right heart pressure was present. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis with previously noted prolapse of the septal leaflet. Doppler indicated measurable insufficiency. The **left ventricle** presented normal thicknesses with linear contour with essential static left ventricle volume compared to the previous study. 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. Mild tricuspid valve insufficiency noted on color doppler assessment. 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.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease with mitral valve septal leaflet prolapse – subjective mild progressive.
- Moderate left atrial enlargement



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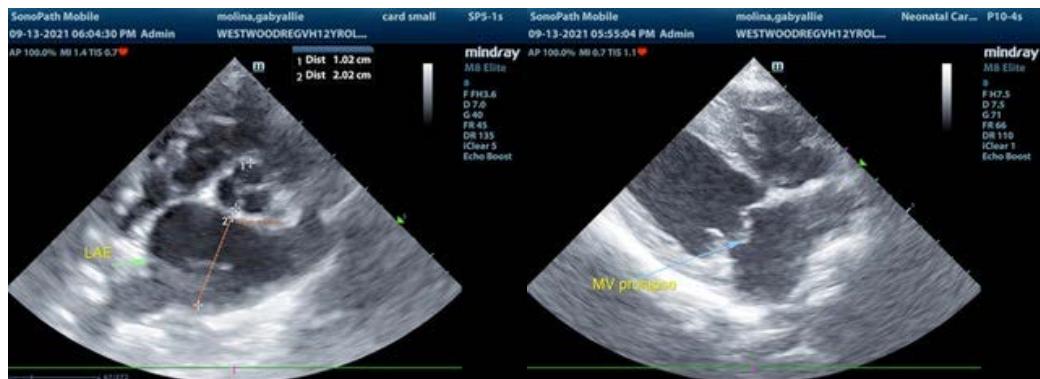
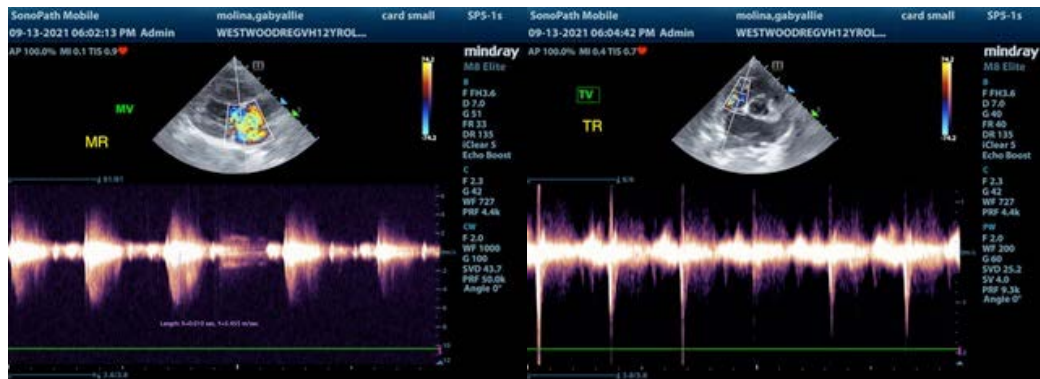
12 Years

WEIGHT

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Without evidence of clinical pulmonary hypertension, yet with evidence of mildly progressive chronic mitral valve disease, the wheezing in this patient may be multifactorial in origin, potentially owing to cardiac decompensation and pulmonary edema if evidence of pulmonary edema on radiographs, as well as potential lower airway disease. Given the mildly elevated BUN and current Lasix dose, the addition of a weak diuretic such as Spironolactone and 1-2 mg/kg PO BID with continuation of Pimobendan may prove beneficial. If coughing is present in this patient, hydrocodone may be considered, as some degree of mainstem bronchi irritation or compression owing to left atrial enlargement may be possible. As-needed continued lower respiratory therapy is recommended. Screening blood pressure recommended to assess for evidence of hypertension. Correlation with 3-view thoracic +/- cervical radiographs (if not recently done) is recommended.



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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.

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