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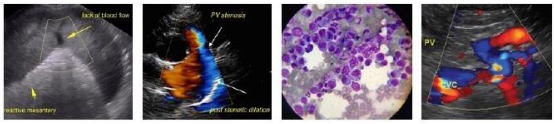

THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

**PATIENT**
Carmey Ekodeu

**SPECIES**
Canine

**BREED**
Maltese

**SEX**
FS

**AGE**
12yr

**WEIGHT**
8.8kg

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

**IMAGING PERFORMED BY**
Kelly Reschny

**HOSPITAL NAME**
Beattie PH Burlington

**REFERRING VET**
Ruggieri

**INVOICE**
13539ag

**DATE**
04/21/2023

## PRESENTING CLINICAL SIGNS

Increased abdominal effort on expiration intermittently. No crackles, wheezing heard on auscultation. Tachypnea, increased rate and effort since yesterday. Grade 4-5/6 SHM. Audible across all lung fields. Coughing improved but still present (hx tracheal collapse) Less energy Eating less but still eating, Vetmedin was recommended beginning of April but O' decided to hold off at the time

Current Medications prednisone - started on the 18th, has stopped April 20th, theophylline

Abnormal PE/Chem/CBC/UA Results: HR 100 RR 66

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

| 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 | <1.3 | 28-40 | 40-100 | <0.6 |
| PATIENT | 5.6 | 2.1 | 1.6 | 1.58 | 62 | 92 | 0.15 |
| **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 | 144 | 1.0 | 0.85 | | 2.7 | 2.7 | |

### *Cardiac Presentation*

The echocardiogram for this patient presented excessive left atrial size expressed both in the LA/AO and LA max measurements. The cranial and caudal mitral valve leaflets presented moderate thickening consistent with endocardiosis. No overt evidence of valvular prolapse. Doppler indicated measurable moderate eccentric insufficiency. The left ventricle presented thicknesses with linear contour and minor increased LV volume. 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 mild thickening with mild TR on Doppler. 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

- Compensated chronic mitral valve disease (ACVIM mild B2)
- Mild TR-estimated pulmonary pressure gradient not consistent with pulmonary hypertension.

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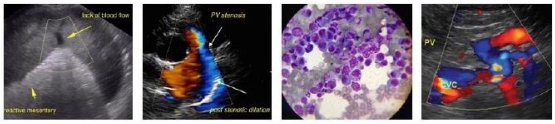

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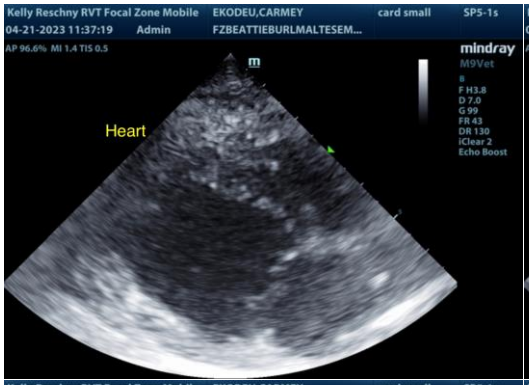
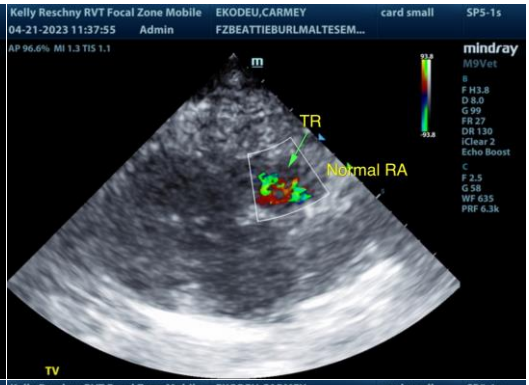
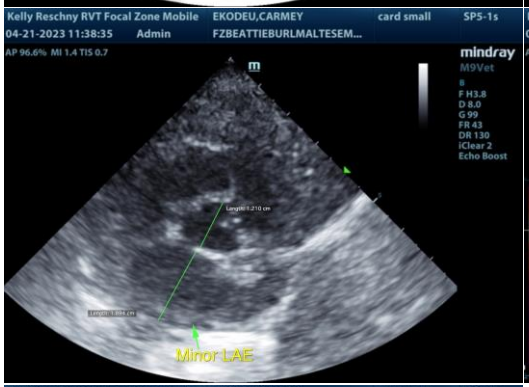
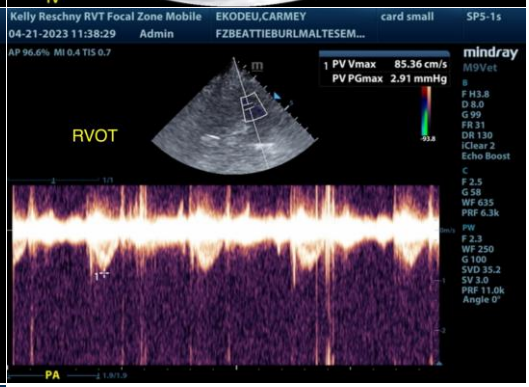
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is consistent with chronic degenerative valvular changes with secondary MR and TR. The lack of significant LA/LV enlargement indicate that the risk of complication secondary to MR if mildly elevated yet not consistent with left sided pulmonary congestion. No evidence of clinical pulmonary hypertension or LV systolic dysfunction. The respiratory abnormalities in this patient do not appear to be cardiogenic in origin with primary consideration for upper or lower respiratory disease. No indication for cardiac medication at this stage. Prognosis is highly variable and serial sonographic monitoring is required for further assessment. Recheck echocardiogram recommended in 6 months, sooner if clinical signs consistent with heart disease arise.





**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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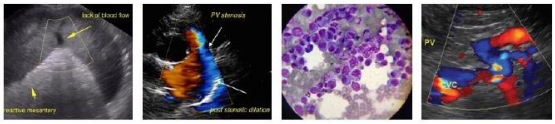

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