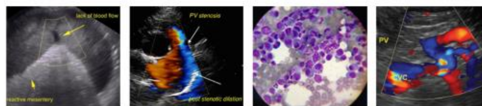
PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Orlando Depietro

SPECIES
Canine

BREED
Maltese Mix

SEX
Male Neutered

AGE
13 years

WEIGHT
10.6lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
New England Animal Medical Center

REFERRING VET
Dr. Fernandez

INVOICE
21911

DATE
11/8/21

PRESENTING CLINICAL SIGNS

History: Presented with labored breathing and diarrhea. Panting, uncomfortable. Increased RR. Previously healthy. Hyporexic. Coughing. On exam, grade III-IV/VI systolic murmur, dyspnea, increased BV sounds bilaterally, soft crackles. Tx: Lasix, CRI, Pimobendan, O2 dependent.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: The LV diameter is normal with hyperdynamic myocardial function. LV wall thicknesses are normal.
Left atrium: The left atrium is mildly dilated.
Mitral valve: The mitral valve is markedly thickened with **a** flail anterior leaflet. Ruptured chordae tendineae visualized (see below). Moderate eccentric mitral regurgitation with a normal velocity.
Aortic valve/aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. Normal aortic insufficiency.
Right ventricle: Normal right ventricular.
Right atrium: Normal RA.
Tricuspid valve: The tricuspid valve is normal with no obvious tricuspid regurgitation.
Pulmonic valve/pulmonary artery: The pulmonic valve is normal in morphology and mobility. Mild pulmonic insufficiency. Normal RVOT velocity; laminar flow.
Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.
Heart rhythm: ECG reveals a sinus rhythm with an average HR of 180bpm.

2-Dimensional Measurements

Ao diam (cm)	1.2
LA diam (cm)	1.8
LA:Ao (Swe)	1.5
IVS thickness (cm)	0.6
LVID diastole (cm)	2.1
PW thickness (cm)	0.7
LVID systole (cm)	0.7
FS (%)	65

Doppler Measurements

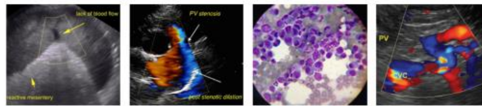
PV Vmax (m/s)	0.7
AoV Vmax (m/s)	0.8
MR Vmax (m/s)	4.9
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

The cause of the murmur is chronic degenerative valve disease causing moderate mitral regurgitation. While mild left atrial enlargement typically indicates a low risk for imminent complication, the finding of a ruptured chord and flail leaflets certainly dramatically raises this risk. No concurrent issues such as systolic dysfunction are noted in this study.

Given these findings and the reported respiratory signs, there is high suspicion for CHF and full cardiac support is recommended as below. Consider hospitalization until stable on room air. Baseline chest radiographs are strongly recommended to confirm the diagnosis with a Radiologist review if possible.

Prognosis is guarded long-term with most CHF cases succumbing within 8-12 months. That being said, if the patient is able to be stabilized there is some potential for an improved outcome given a lack of significant chamber enlargement. Follow up will help dictate long term picture.



PATIENT
Orlando Depietro

SPECIES
Canine

BREED
Maltese Mix

SEX
Male Neutered

AGE
13 years

WEIGHT
10.6lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
New England Animal Medical Center

REFERRING VET
Dr. Fernandez

INVOICE
21911

DATE
11/8/21

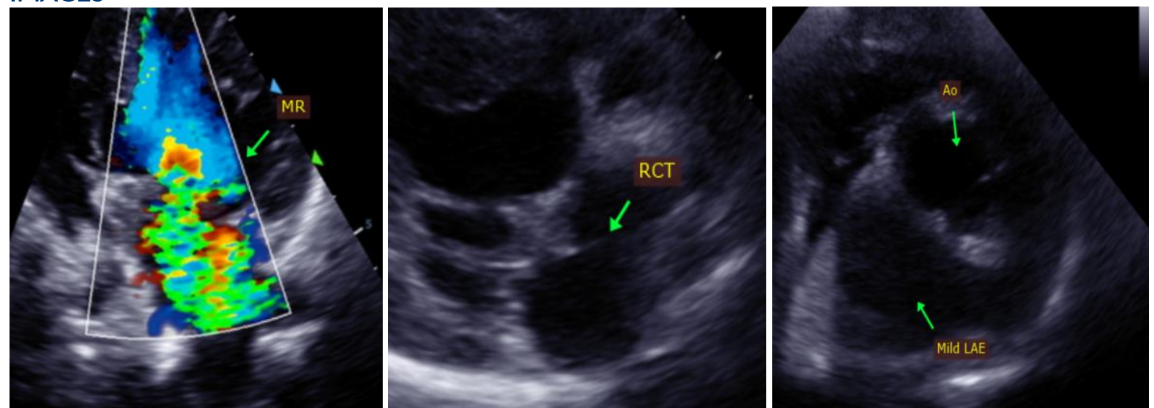
RECOMMENDATIONS

- Continue hospitalization/CXR review as discussed.
- Institute Pimobendan 0.25-0.3mg/kg PO q12h.
- Institute Lasix 1-2mg/kg PO q12h.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Elective anesthesia is not advised at this time.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes. Monitor sleeping breathing rates at home as the best way to monitor for recurrent issues.

PLAN

- Recheck renal panel/BP in 1-2 weeks to ensure tolerance of medications, then every 3-4 months lifelong. If patient is doing well and BP is >130mmHg, institute ACE-I 0.5mg/kg PO q12h.
- 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