



PATIENT PRESENTING CLINICAL SIGNS

Red Luksha History: Seen at ER with episode of syncope - diagnosed with cardiomyopathy. Radiographs: generalized cardiomegaly. Very thin on exam. No murmur noted. BP: 153, 154, 156, 157mmHg.

SPECIES ECHOCARDIOGRAM FINDINGS

Feline 2D, m-mode, color flow and Doppler imaging is available.

BREED The LV wall thicknesses are largely normal with significant irregularity and remodeling. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled and hyperechoic. False tendon.

SEX **Left atrium:** The left atrium is mildly dilated. No obvious spontaneous contrast or thrombi seen.

Male Neutered **Mitral valve:** The anterior leaflet of mitral valve is elongated with a club like appearance. Decreased excursion in diastole seen on 2D and color flow imaging. Mitral inflows and color flow pattern are consistent with mitral stenosis. Mild eccentric MR. No obvious SAM is seen.

AGE **Aortic valve/Aorta:** The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.

9 years **Right ventricle:** Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.

WEIGHT **Right atrium:** The right atrium is normal in dimension.

7.6lbs **Tricuspid valve:** The tricuspid valve appears normal with no tricuspid regurgitation.

INTERPRETED BY **Pulmonic valve/Pulmonary artery:** The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.

Maggie Machen
Lamy, DVM
DACVIM (Cardiology) **Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses.

Heart rhythm: ECG reveals a sinus rhythm with an average HR of 150bpm.

2-Dimensional Measurements

Doppler Measurements

Ao diam (cm)	1.1
LA diam (cm)	1.6
LA:Ao (Swe)	1.4
IVS thickness (cm)	0.34
LVID diastole (cm)	1.7
PW thickness (cm)	0.36
LVID systole (cm)	0.75
FS (%)	56

PV Vmax (m/s)	0.7
AoV Vmax (m/s)	1.0
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

IMAGING PERFORMED BY

Pamela Harrigan,
RDMS

HOSPITAL NAME

Compassionate Care
Veterinary Clinic

REFERRING VET

Dr. Patil

INVOICE

32297

DATE

8/10/23

INTERPRETATION OF THE FINDINGS

The cause of cardiomegaly is mitral valve stenosis. This is a congenital valve issue present from birth due to an abnormal mitral valve morphology. This is commonly a silent disease as no obvious murmur is typically appreciated, as is the case here. The valve being unable to open fully in diastole leads to increased left atrial pressures and mild left atrial enlargement has developed. An outflow tract obstruction is not appreciated and no LVH is seen, suggesting this is unlikely to be a concurrent issue. No other issues are seen with normal LV wall dimensions, albeit a highly remodeled left ventricle. No additional issues are identified.



PATIENT
 Red Luksha

What is unusual in this case is syncope is noted, which is difficult to explain based upon these findings. Unless an outflow tract obstruction is present at higher heart rates that is not appreciated here, this is considered unlikely to be related. Intermittent arrhythmias, blood pressure swings, etc. should be considered. If the episodes recur and are purely with exertion and times of high heart rate, a low dose of Atenolol could be trialed to see if this improves the symptom. Otherwise, no medications are warranted.

SPECIES
 Feline

BREED
 DSH

Prognosis is guarded, due to the highly variable rates of progression with subclinical feline cardiomyopathy. That being said, in a 9-year-old cat with congenital disease, mild left atrial enlargement suggests this is relatively well compensated for. Serial monitoring is advised.

SEX
 Male Neutered

RECOMMENDATIONS

- Given these findings, no medications are indicated.
- If syncope recurs and is exertional in nature, consider low-dose Atenolol 6.25mg PO q12h.
- Monitor BP and T4 every 6 months.
- Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, and isoflurane maintenance.
- Risk for complication with steroid use typically follows LA dilation, which in this case is low. That being said, any cat can experience unexpected signs of intolerance and monitoring of RR/RE is advised particularly in the initiation phase.
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).

AGE
 9 years

WEIGHT
 7.6lbs

INTERPRETED BY

Maggie Machen
 Lamy, DVM
 DACVIM (Cardiology)

PLAN

- Recommend recheck echocardiogram in 6 months to screen for progression, sooner if any clinical signs arise in the interim.

IMAGING PERFORMED BY

Pamela Harrigan,
 RDMS

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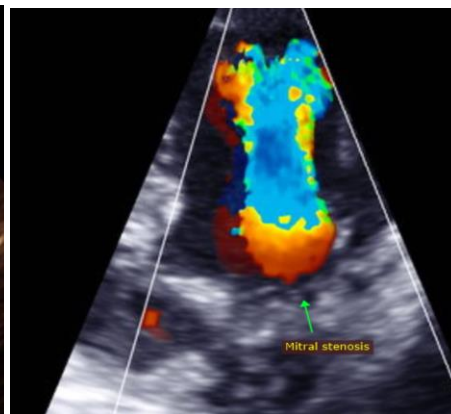
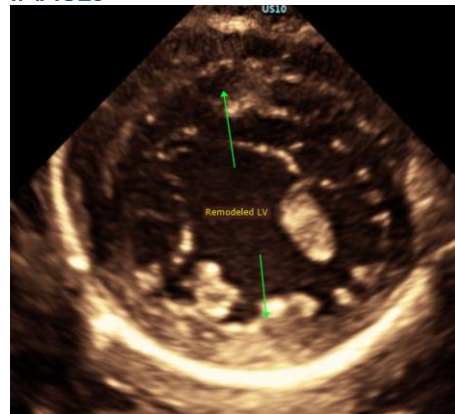
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IMAGES





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Red Luksha

SPECIES

Feline

BREED

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SEX

Male Neutered

AGE

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7.6lbs

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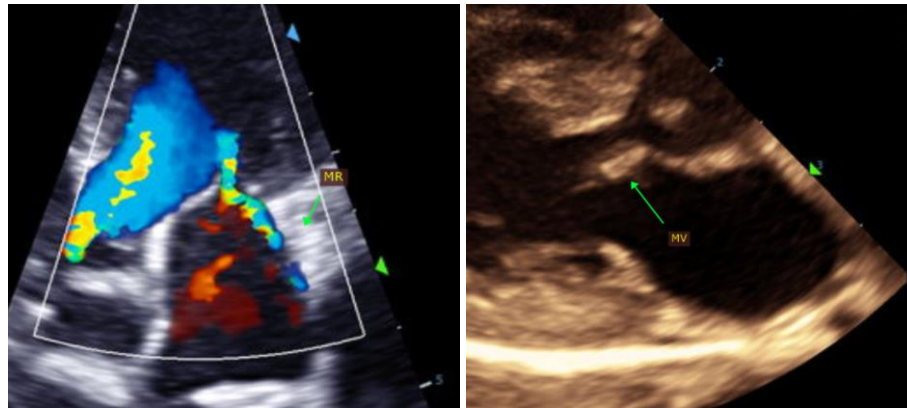
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. 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.

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Echocardiogram performed by: Pamela Harrigan, RDCS
 Pet Animal Ultrasound Service (4paus.com)