

PATIENT PRESENTING CLINICAL SIGNS

Chico Nogas

History: Chico was referred for evaluation of a progressive heart murmur. Good appetite and energy. CV/RESP: NSR grade III/VI murmur with PMI on sternum PSS lung fields clear compressible thorax. BP: 120mmHg x 3.

SPECIES

-Current medications: Tobramycin prn, L-lysine prn *Sedated with propofol.

Feline

ECHOCARDIOGRAM FINDINGS

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

BREED

Left ventricle: The LV diameter is normal with adequate myocardial function. The LV wall thicknesses are irregular with regions of mild hypertrophy contrasting regions of apical thinning. There is a diffusely hyperechoic endocardium consistent with mild fibrosis. The papillary muscles are mildly hypertrophied. The endocardium appears mildly remodeled.

DSH

SEX

Left atrium: The left atrium and auricle are mildly dilated. No spontaneous contrast or thrombi seen.

Male Neutered

Mitral valve: The anterior leaflet of the mitral valve is thickened and elongated. Abnormal anterior motion is seen during systole. Mild to moderate eccentric mitral regurgitation.

AGE

Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Minimally elevated LVOT outflow velocities with a dynamic profile. No aortic insufficiency.

7 years

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

Right atrium: The right atrium is normal in dimension.

WEIGHT

Tricuspid valve: The tricuspid valve appears normal with no tricuspid regurgitation.

12.75lbs

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

Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.

INTERPRETED BY

Heart rhythm: ECG reveals a sinus rhythm with an average HR of 120bpm.

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

2-Dimensional Measurements

Doppler Measurements

Ao diam (cm)	1.1
LA diam (cm)	1.5
LA:Ao (Swe)	1.4
IVS thickness (cm)	0.66
LVID diastole (cm)	1.4
PW thickness (cm)	0.60
LVID systole (cm)	0.67
FS (%)	52

PV Vmax (m/s)	0.7
AoV Vmax (m/s)	2.0
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

IMAGING

PERFORMED BY

Pamela Harrigan,
RDCS

HOSPITAL NAME

Mass Veterinary
Specialty Services

REFERRING VET

Dr. Masloski

INVOICE

21243

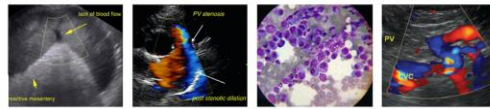
DATE

9/28/21

INTERPRETATION OF THE FINDINGS

The likely diagnosis and cause of the murmur is mitral valve dysplasia leading to an obstructive LVOT flow pattern and mild/moderate MR. My suspicion is the obstruction is more significant when the patient is not heavily sedated. A primary hypertrophic component cannot be ruled out as a concurrent issue; however, with only mild LV changes this is unlikely. There is mild left atrial and auricular dilation, indicating the risk for imminent complication is low; however, there is concern for risk for progression to spontaneous CHF and/or a thrombotic event going forward. No additional issues are identified.

Long term prognosis is guarded given the age of the patient and highly variable nature of asymptomatic feline heart disease. Many cats will remain asymptomatic until mid-life or



PATIENT
Chico Nogas

beyond, while others develop CHF within the first years. Close monitoring for progression of LA dilation in the future will help determine long term prognosis.

SPECIES
Feline

While no medications have been shown to definitively alter long term outcome at this stage of disease, atenolol is often initiated to decrease the outflow obstruction. In cases of solely primary MV dysplasia this can lead to improvement in the degree of obstruction and hypertrophy. Given today's findings, consider institution at this time if possible. No additional medications are indicated prior to significant LA dilation.

BREED
DSH

RECOMMENDATIONS

- Administer titrating dose of atenolol: 25mg tablets; Give ¼ tab once daily. Recheck heart rate in 1-2 weeks with target stressed rate of 140-160bpm 12-24 hours post-administration. Increase as needed until target reached.
- Anesthetic risk is considered mildly elevated, 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). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance.
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).

SEX
Male Neutered

AGE
7 years

WEIGHT
12.75lbs

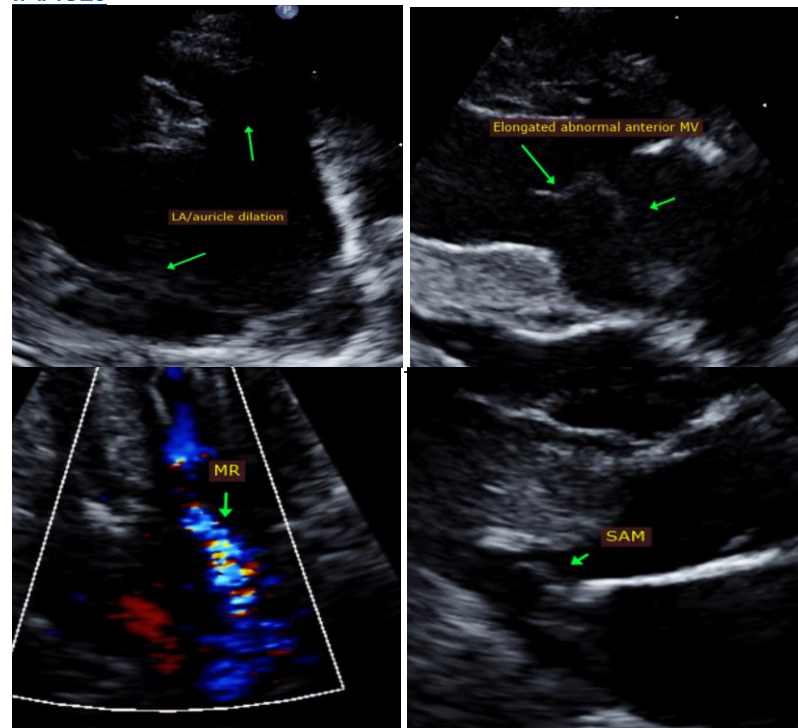
PLAN

- Recommend recheck echocardiogram in 6 months to assess for progression/regression, sooner if clinical signs arise in the interim.

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGES



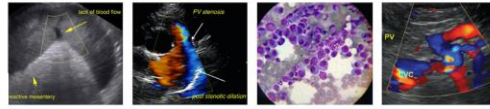
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Chico Nogas
The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES
Feline
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.

BREED
DSH
Maggie Machen Lamy, DVM
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SEX
Male Neutered
Echocardiogram performed by: Pamela Harrigan, RDCS
Pet Animal Ultrasound Service (4paus.com)

AGE
7 years

WEIGHT
12.75lbs

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