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Clinical Sonography & Telecytology
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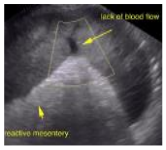
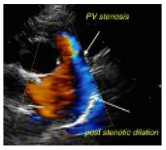
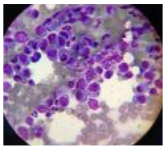
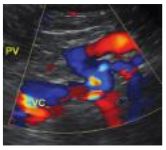





SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Michelangelo Cargiulo-Garcia

SPECIES
Feline

BREED
Sphynx

SEX
Male Neutered

AGE
7 years

WEIGHT
7lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY
Kim Liedberg

HOSPITAL NAME
SVS Imaging WI

REFERRING VET
Dr. Bloss

INVOICE
21815

DATE
11/1/21

PRESENTING CLINICAL SIGNS

History: Recheck echo. Previously presented with inappetence and lethargy.
Current medications: Atenolol 12.5mg q24h (at night).
Pertinent previous echo findings (MML 5/2021): mild/mod LVH, mild LAE, SAM, mild MR; IVSd 0.71cm, LVPWd 0.71cm, LA 1.37cm, AV max 2.0m/s

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 25mm/s, 5mm/mV. The average heart rate is 188bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. No ectopic beats, pauses or other dysrhythmias observed.
ECG diagnosis: Normal sinus tachycardia.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is moderately hypertrophied with a decreased LV chamber. There is a diffusely hyperechoic endocardium. Papillary muscles appear hyperechoic and hypertrophied. The right ventricle is normal. There is minimal left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. Abnormal anterior motion of the mitral valve is present, with the tip visible in the LVOT during systole. Elevated LVOT velocity seen on color flow (Spectral inaccurate). The anterior leaflet of the MV is elongated and thickened, consistent with dysplasia. There is moderate eccentric mitral regurgitation present. No TR. No other obvious valvular regurgitation is present. No obvious intra or extracardiac shunts seen. There is no pericardial effusion noted. No pleural effusion appreciated.

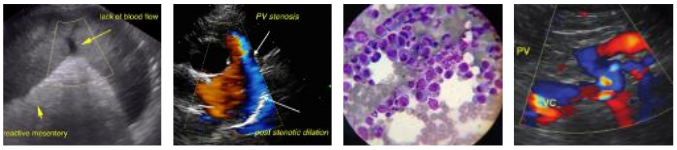
CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	------	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	3.2	174	0.76	1.0	0.73	60	94
FELINE CARDIAC PARAMETERS	**LA/AO** (Boon)	**LA/AO HEART BASE (Swe)** (Abbott)	**LA** 2D short axis Base view (cm) (Abbott)		**LVOT VEL** (m/s)	**RVOT VEL** (m/s)	**E max** (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	1.77	1.4	1.1		1.1	1.6	NM

**Note: All measurements based upon multi-modal images and methods. An average value is reported.*
Adapted from June Boon, Veterinary Echocardiography,1998
Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

HOCM persists with evidence of relative stability. While the LV wall dimension is slightly increased comparatively, the LA dimension is improved presumably due to atenolol therapy. The MV appears more dysplastic than was appreciated on the prior study, and some degree of MV dysplasia is suspected as a contributing factor. Regardless, the LVOT obstruction persists with secondary MR. There is no left atrial dilation, indicating the risk of spontaneous CHF and/or a



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thrombotic event is currently low. A screening BP and T4 are recommended every 6 months, as both can exacerbate disease. The ECG is unremarkable with a normal sinus tachycardia.

This patient remains borderline for an increase in atenolol dosing. It's unusual to see a HR of 188bpm with a high dose of atenolol, and my suspicion is the rate is reasonable throughout the rest of the day. Based upon improvement in LA dimension, recommend continuing at the current dose for now. Should things progress in the future, q12h dosing may become indicated.

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). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance. Risk for complication with steroid use typically follows LA dilation, which in this case is mildly elevated. If needed, monitoring of RR/RE is advised particularly in the initiation phase.

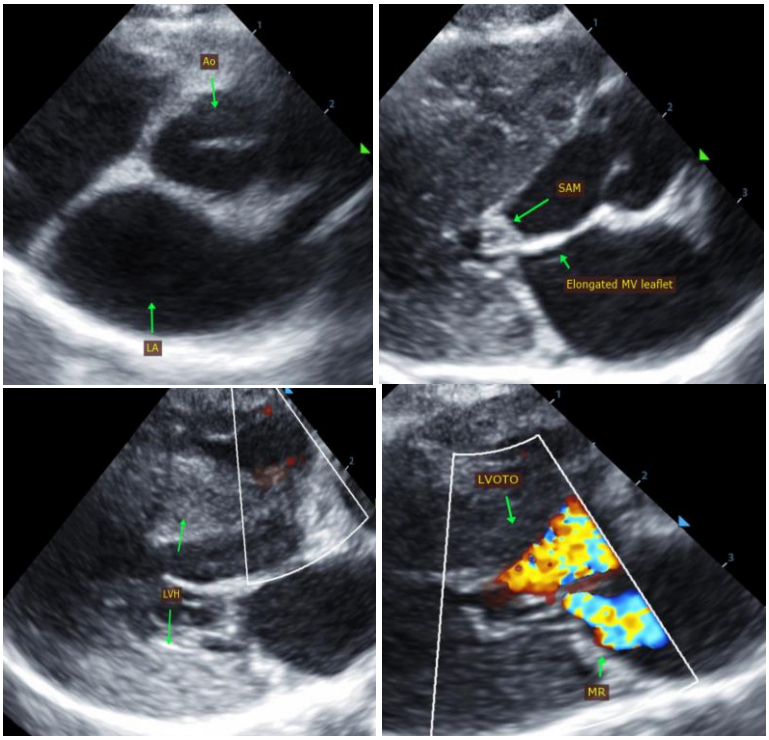
Monitor at home for any respiratory signs or blood clot events (neurologic change, paralysis, etc.) in the future.

PLAN

Screening BP/T4 q6 mo. Continue atenolol as prescribed.

Recommend recheck echocardiogram in 6 months to assess for progression, sooner if clinical issues arise.

IMAGES



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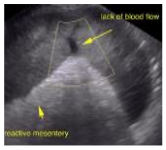
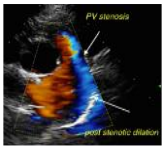
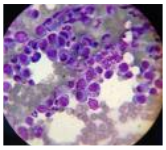
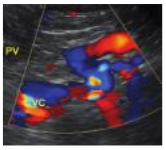

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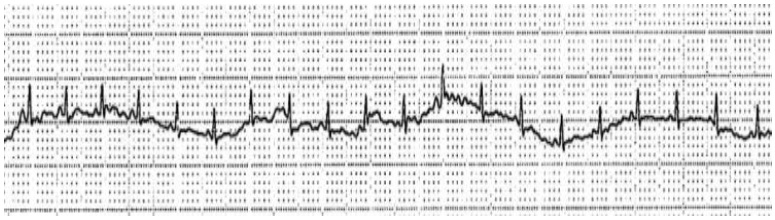

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com