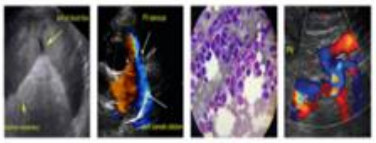
Mass Veterinary Services



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

PATIENT
Oz Englehart

SPECIES
Feline

BREED
Balinese

SEX
Male Neutered

AGE
10 years

WEIGHT
13.44lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
24267

DATE
5/18/22

PRESENTING CLINICAL SIGNS

History: Oz was recently noted to have a heart murmur. Good appetite - picky eater. On exam today: NSR, grade III/VI parasternal murmur, PSS, lung fields clear, compressible thorax. BP: 80mmHg x 5.

ECHOCARDIOGRAM FINDINGS

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

Left ventricle: The LV diameter is normal with adequate myocardial function. The LV wall thicknesses are largely normal with regions of irregularity. There is a diffusely hyperechoic endocardium consistent with mild fibrosis. False tendon. The papillary muscles are mildly remodeled and hyperechoic. A mild mid-cavitary dynamic obstruction is seen on color flow and Doppler.

Left atrium: The left atrium is normal in dimension. No obvious spontaneous contrast or thrombi seen.

Mitral valve: The mitral valve is normal in structure and mobility. No obvious systolic anterior motion is seen. Trivial MR.

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

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.

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

Pulmonic 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.

Heart rhythm: ECG reveals a sinus rhythm with an average HR of 220bpm.

2-Dimensional Measurements

Ao diam (cm)	1.1
LA diam (cm)	1.2
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.34
LVID diastole (cm)	1.6
PW thickness (cm)	0.40
LVID systole (cm)	0.5
FS (%)	69

Doppler Measurements

PV Vmax (m/s)	1.5
AoV Vmax (m/s)	1.3
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

Essentially normal cardiac structure and function. The LV wall thickness is normal and there is no evidence of elevated left atrial pressure. There is significant remodeling and fibrosis of the left ventricular wall, which may be an age-related change or may represent early pathology. Monitoring is advised. The only cause of a murmur identified is a mid-LV obstruction. This is a typically benign finding that occurs due to tachycardia/stress and/or volume changes.

The blood pressure is significantly low for a healthy patient in hospital and reassessment is advised.

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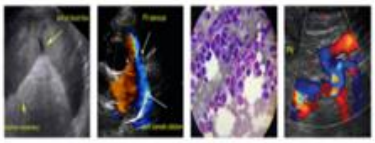

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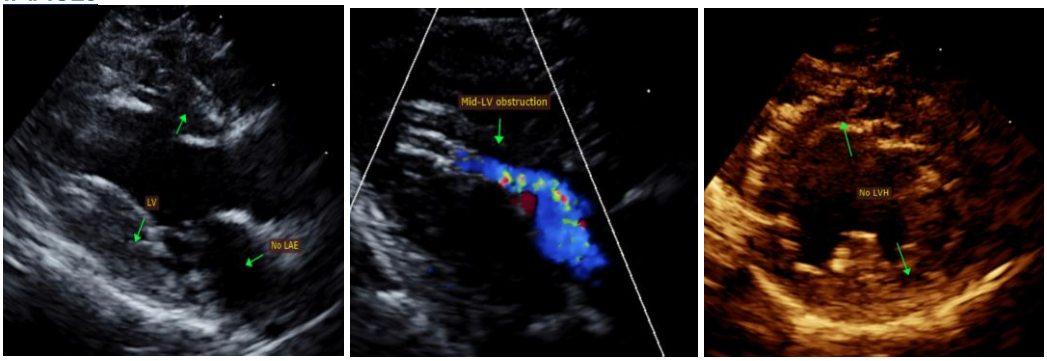
RECOMMENDATIONS

- Given these findings, no medications are indicated.
- Reassess BP as discussed.
- 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. Additionally, steroids should be used with caution on older cats, as even a 'normal' geriatric heart can develop evidence of intolerance and fluid retention.
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).

PLAN

- Recommend recheck echocardiogram in 1 year to reassess murmur origin and screen for development of disease the pre-existing murmur may mask.

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

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