



PRESENTING CLINICAL SIGNS

History: Grade 3-4/6 left-sided murmur. Pre-anesthetic evaluation (dental).

DATE

3/13/23

ECHOCARDIOGRAPHIC FINDINGS

2D, M-mode, and Doppler study.

PERFORMED BY:

Kim Liedberg

INTERPRETED BY

Keith Blass, DVM,
MS, DACVIM
(Cardiology)

There is mild left atrial dilation. The left auricle is dilated, and faint spontaneous contrast is visible within the auricle. There is severe hypertrophy of the left ventricular posterior wall, as well as mild hypertrophy of the interventricular septum. Left ventricular internal dimensions are normal. Left ventricular systolic function is normal. There is systolic anterior motion of the mitral valve leaflets creating dynamic obstruction to flow in the left ventricular outflow tract, with mild secondary mitral regurgitation. The aorta and aortic valve are normal. Right atrial and right ventricular dimensions are normal. The tricuspid valve is normal. The pulmonary artery and pulmonic valve are normal. No shunting lesions are visualized. No heartworms are visualized. No pericardial effusion or cardiac masses are seen.

PATIENT

Frankie MacKenzie

LA/Ao - 1.66
IVSd - 6.1 mm
LVPWd - 8.3 mm
LVIDd - 11.2 mm
LVIDs - 6.1 mm
FS - 45.5%
RA - 11.5 mm
RVOT - 1.48 m/s

SPECIES

Feline

ELECTROCARDIOGRAPHIC FINDINGS

A single lead ECG is submitted for review.

BREED

HR: 250 bpm
Rhythm: Sinus tachycardia

DSH

Sinus tachycardia is present throughout this recording. All complex amplitudes and intervals are within normal limits. No premature beats or conduction blocks are seen.

SEX

RADIOGRAPHIC FINDINGS

MN

Three-view thoracic radiographs are submitted for review.

AGE

There is mild generalized enlargement of the cardiac silhouette. The pulmonary vessels are within normal limits. The pulmonary parenchyma and pleural space are within normal limits. The trachea is normal. The remainder of the thorax is unremarkable.

13 y

ASSESSMENT/RECOMMENDATIONS

Hypertrophic obstructive cardiomyopathy (HOCM)

WEIGHT

8.37 lb

This examination demonstrates severe hypertrophy of Frankie's left ventricular posterior wall and mild hypertrophy of his interventricular septum. This is very likely consistent with the presence of HCM, though systemic hypertension and hyperthyroidism should be ruled out as possible contributing factors. Associated with his hypertrophy, Frankie has systolic anterior motion (SAM) of his mitral valve leaflets, which is creating dynamic obstruction to flow in his left ventricular outflow tract, and is the cause of his heart murmur. Secondary to his hypertrophy, Frankie has mild dilation of his left atrium. Given this, Frankie is at risk for the development of left-sided congestive heart failure, and careful monitoring of his respiratory rate/effort is recommended. He is also at risk for cardiac thrombus formation with secondary thromboembolic disease, therefore, careful monitoring for the development of limb paresis/paralysis is

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

Dr. Gordon



recommended.

DATE Frankie's radiographs demonstrate the presence of cardiomegaly with no evidence of congestive heart failure.

3/13/23

No abnormalities are appreciated in Frankie's ECG.

PERFORMED BY: Frankie's cardiovascular risk for general anesthesia, especially his risk for fluid overload, is moderately increased based on his echocardiogram, therefore, precautions should be taken in order to minimize this risk. I recommend avoiding the use of alpha-2 agonists, ketamine, and telazol in the anesthetic protocol, as well as reducing the IV fluid rate by 50% and pre-oxygenating Frankie for a few minutes prior to induction. If possible, monitoring of heart rhythm, blood pressure, and pulse oximetry are recommended during the procedure.

Kim Liedberg

INTERPRETED BY

Keith Blass, DVM,
MS, DACVIM
(Cardiology)

I recommend starting Frankie on enalapril (1.25 mg BID) and clopidogrel (18.75 mg SID), as the former may help to slow the progression of his cardiac disease, while the latter should help to reduce his risk for cardiac thrombus formation.

PATIENT

A renal/electrolyte profile is recommended in 1-2 weeks to make sure that Frankie's kidneys are tolerating the enalapril well. A recheck echocardiogram is recommended in 6 months. Repeat radiographs are recommended if Frankie experiences respiratory clinical signs.

Frankie MacKenzie

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

13 y

WEIGHT

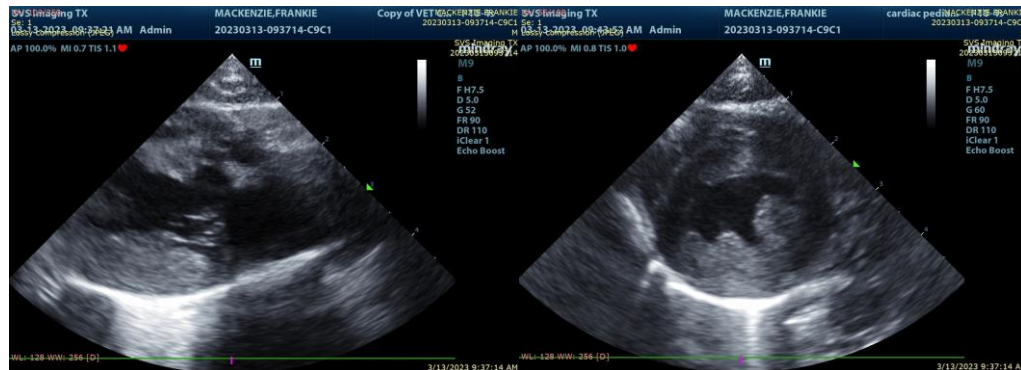
8.37 lb

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

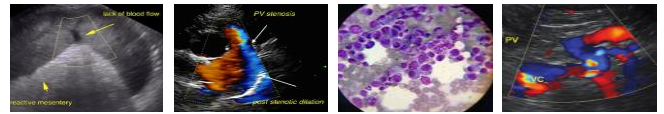
Dr. Gordon



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. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Keith Blass, DVM, MS, DACVIM (Cardiology)
KeithBlass@gmail.com
631-804-5754



DATE

3/13/23

PERFORMED BY:

Kim Liedberg

INTERPRETED BY

Keith Blass, DVM,
MS, DACVIM
(Cardiology)

PATIENT

Frankie MacKenzie

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

13 y

WEIGHT

8.37 lb

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

Dr. Gordon