


PRESENTING CLINICAL SIGNS

DATE History: Grade 3-4/6 murmur. Pre-dental evaluation (dental). Mildly productive cough that has worsened despite antibiotic therapy. Harsh lung sounds.

1/10/23

ECHOCARDIOGRAPHIC FINDINGS

2D, M-mode, and Doppler study.

PERFORMED BY:

Jessica Miller

INTERPRETED BY

Keith Blass, DVM,
MS, DACVIM
(Cardiology)

There is moderate left atrial dilation. The mitral valve leaflets are thickened and exhibit systolic prolapse. A moderate jet of eccentric mitral regurgitation is present. There is mild left ventricular dilation. Left ventricular systolic function is hyperdynamic. The aorta and aortic valve are normal. Right atrial and right ventricular dimensions are normal. The tricuspid valve leaflets are mildly thickened, and a mild jet of tricuspid regurgitation is present. TR velocity is consistent with the presence of mild pulmonary hypertension (PG 44 mmHg). The pulmonary artery and pulmonic valve appear normal, though trace pulmonic insufficiency is present. No shunting lesions are visualized. No pericardial effusion or cardiac masses are seen.

PATIENT

Cupcake Rehley

LA - 33.2 mm
LVIDd - 29.3 mm
LVIDs - 13.7 mm
FS - 53.2%
RA - 18.6 mm
LVOT - 1.74 m/s
RVOT - 0.88 m/s
TR - 3.33 m/s

SPECIES

Canine

ASSESSMENT/RECOMMENDATIONS

Degenerative mitral and tricuspid valve disease
Pulmonary hypertension

BREED

Pomeranian

This examination demonstrates regurgitation of blood across Cupcake's mitral and tricuspid valves resulting from degenerative valve disease. Cupcake's tricuspid valve disease is mild, and appears to be well-compensated at this time. Her mitral valve disease is more advanced, as Cupcake has moderate mitral regurgitation present, with moderate secondary dilation of her left atrium and mild dilation of her left ventricle, as well as mild secondary pulmonary hypertension. Given the presence of moderate left atrial dilation, it's possible that mainstem bronchial compression could be contributing to Cupcake's cough, however, there is a soft tissue opacity in the area of her right middle lung lobe in Cupcake's radiographs that could potentially be contributing to the cough. The opacity doesn't have a typical appearance of pneumonia, therefore, something like a neoplasm, cyst, granuloma, or hematoma would seem more likely. Cupcake's mitral valve disease is still compensated, however, careful monitoring of her respiratory rate/effort is recommended going forward.

SEX

FS

AGE

13 y

WEIGHT

16.2 lb

A fine needle aspirate of the soft tissue opacity seen in Cupcake's radiographs is recommended, if possible.

I recommend starting Cupcake on pimobendan (2.5 mg am, 1.25 mg pm), as this medication should help to slow the progression of her mitral valve disease, and hydrocodone (2.5 mg PRN, up to every 6 hours), as this help to improve her cough. No therapy is recommended for Cupcake's pulmonary hypertension at this time.

HOSPITAL NAME

Long Valley AH

REFERRING VET

Dr. Welch-
Pempkowski

Cupcake's cardiovascular risk for general anesthesia is mildly to moderately, approaching moderately, increased based on this exam, 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, reducing the IV fluid rate by 50%, and pre-oxygenating Cupcake for a few



minutes prior to induction. If possible, monitoring of heart rhythm, blood pressure, and pulse oximetry are recommended during the procedure.

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A recheck echocardiogram is recommended in 6 months to monitor for disease progression.

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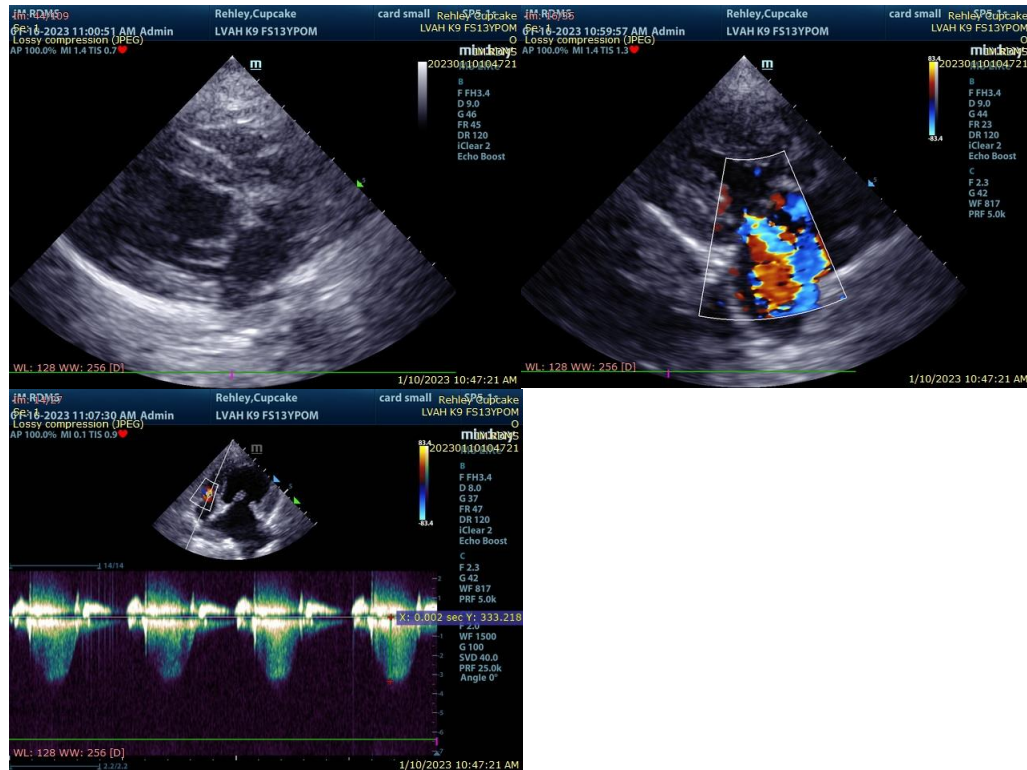
16.2 lb

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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. 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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