


PRESENTING CLINICAL SIGNS
DATE

8/19/22

History: Grade 4-5/6 murmur. Long history of upper airway/tracheal disease. Coughing dramatically worsened in the last 3 days. Increased RR/RE noted at home, not eating well, diarrhea. PE – marked inspiratory effort, pale mm, RR 72, harsh to crackly lung sounds. Some improvement with furosemide, oxygen supplementation. ECG – occasional VPC. Radiographs – enlarged cardiac silhouette, right-sided bronchial pattern, left-sided patchy alveolar areas. BUN 94, Cr 1.8, SDMA 18.

PERFORMED BY:

Rachel Runnells, RVT

ECHOCARDIOGRAPHIC FINDINGS

2D, M-mode, and Doppler study.

INTERPRETED BY

 Keith Blass, DVM,
 MS, DACVIM
 (Cardiology)

Left atrial size is normal. The mitral valve leaflets are thickened and exhibit systolic prolapse. A mild jet of eccentric mitral regurgitation is present. Left ventricular dimensions are normal. Left ventricular systolic function is hyperdynamic. The aorta and aortic valve are normal. Right atrial and right ventricular dimensions are normal. The tricuspid valve appears normal, though trace tricuspid regurgitation is present. TR velocity is consistent with the presence of mild pulmonary hypertension (PG 39.7 mmHg). The pulmonary artery and pulmonic valve appear normal, though trivial pulmonic insufficiency is present. No shunting lesions are visualized. No heartworms are visualized. No pericardial effusion or cardiac masses are seen.

PATIENT

Gigi Lewis

 LA – 21.0 mm
 LVIDd – 20.9 mm
 LVIDs – 8.9 mm

SPECIES

Canine

 FS – 57.4%
 RA – 16.0 mm
 LVOT – 1.70 m/s
 RVOT – 2.00 m/s
 TR – 3.15 m/s

BREED

Yorkie

ASSESSMENT/RECOMMENDATIONS

 Degenerative mitral valve disease
 Pulmonary hypertension

SEX

FS

This examination demonstrates mild regurgitation of blood across Gigi’s mitral valve resulting from degenerative valve disease. The hemodynamic effects of the regurgitation also appear to be mild, as Gigi does not have secondary dilation of either of her left heart chambers, and her left ventricular systolic function is well-preserved. Given the absence of left heart chamber dilation, it seems unlikely that left-sided congestive heart failure is the cause of Gigi’s respiratory clinical signs and radiographic abnormalities, and primary respiratory disorders, such as pneumonia, interstitial lung disease, pulmonary thromboembolism, and non-cardiogenic pulmonary edema should be considered more likely causes. Having said that, I haven’t seen Gigi’s radiographs and can’t definitively comment on whether cardiogenic pulmonary edema could be present.

AGE

11 y

WEIGHT

8 lb

Also seen in this exam is evidence of mild pulmonary hypertension. Mild pulmonary hypertension is typically well-tolerated in dogs, therefore, it’s unlikely to be contributing to Gigi’s respiratory symptoms.

HOSPITAL NAME

SVS Imaging KC

No specific therapy is recommended based on Gigi’s echocardiogram, however, a continued trial with furosemide (lowest effective dose given her BUN level) and pimobendan (1.25 mg BID) can be considered if there is suspicion for CHF based on her radiographs. Similarly, no therapy for Gigi’s pulmonary hypertension appears to be warranted based on her echocardiogram, however, a trial with sildenafil (5 mg BID) can be considered if no other therapy is improving her respiratory rate/effort.

REFERRING VET

Dr. Hook



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

DATE

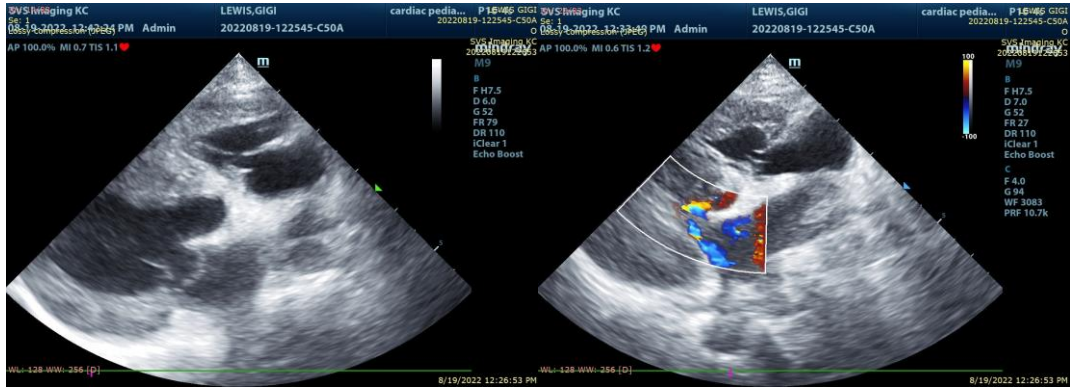
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PATIENT

Gigi Lewis

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.

SPECIES

Canine

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BREED

Yorkie

SEX

FS

AGE

11 y

WEIGHT

8 lb

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

Dr. Hook