



PRESENTING CLINICAL SIGNS

History: Presented for a cough that started months ago and has slowly worsened over time. A few days ago, the cough was honking and Marshall had a little more difficulty breathing. Started on furosemide. No murmur. Possible gallop sound.

DATE

5/6/22

ECHOCARDIOGRAPHIC FINDINGS

2D, M-mode, and Doppler study.

PERFORMED BY:

Tom McNeill

INTERPRETED BY

Keith Blass, DVM,
MS, DACVIM
(Cardiology)

There is moderate left atrial dilation. The mitral valve appears normal, though a mild jet of centrally directed mitral regurgitation is present. There is severe left ventricular dilation. Left ventricular systolic function is severely depressed. The aorta and aortic valve appear normal, though there is mildly increased flow velocity in the ascending aorta. Right atrial and right ventricular dimensions are normal. The tricuspid valve appears normal, though mild tricuspid regurgitation is present. TR velocity does not suggest the presence of pulmonary hypertension. The pulmonary artery and pulmonic valve are normal. No shunting lesions are visualized. No pericardial effusion or cardiac masses are seen.

PATIENT

Marshall Vaughan

LA - 57.3 mm
LVIDd - 64.3 mm
LVIDs - 53.7 mm
FS - 16.5%
RA - 44.6 mm
LVOT - 1.75 m/s
RVOT - 1.05 m/s
TR - 2.45 m/s

SPECIES

Canine

ELECTROCARDIOGRAPHIC FINDINGS

A single lead ECG is submitted for review.

BREED

Pitbull Terrier

HR: 142 bpm
Rhythm: Sinus with an APC

Normal sinus rhythm is present throughout this recording. All complex amplitudes and intervals are within normal limits. A single APC is present. No ventricular ectopy or conduction blocks are seen.

SEX

MN

RADIOGRAPHIC FINDINGS

A lateral thoracic radiograph is submitted for review.

AGE

6 y

The cardiac silhouette is tall with elevation of the trachea, consistent with left ventricular enlargement, and there is a mild loss of the caudal waist, consistent with left atrial enlargement. The pulmonary vessels are within normal limits. The pleural space is within normal limits. The caudal portion of the lungs appear normal. There is an increased opacity in the cranial portion of the lung field, though it's possible that this could be due to superimposition with forelimb musculature. The trachea is normal. The remainder of the thorax is unremarkable.

WEIGHT

87.4 lb

ASSESSMENT/RECOMMENDATIONS

Dilated cardiomyopathy (DCM)

HOSPITAL NAME

SVS Imaging CT

Marshall's echocardiogram demonstrates severe depression of his left ventricular systolic function, consistent with DCM. It's possible that he could be suffering from a primary genetic-based form of the disease, though consideration should also be given to the presence of a diet-associated cardiomyopathy if Marshall has been receiving one linked to the development of myocardial dysfunction in dogs (ex. grain-free, peas, lentils in first few ingredients). Secondary to his myocardial dysfunction, Marshall has severe dilation of his left ventricle and moderate dilation

REFERRING VET

Dr. Ridenour



of his left atrium. While I don't see definitive evidence of pulmonary edema in Marshall's radiographs, it's possible that the presence of mild edema could be the cause of his increased respiratory effort over the past few days, though consideration should also be given to low cardiac output as possible cause. Given the presence of moderate left atrial dilation, I suspect that mainstem bronchial compression is contributing to Marshall's cough. In addition to respiratory signs, Marshall is at risk for the development of exercise intolerance and syncope, therefore, careful monitoring for these signs is recommended.

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Marshall's ECG demonstrates the presence of a single APC. Mild atrial arrhythmias are well-tolerated in dogs, though Marshall is at risk for the development of a more severe supraventricular arrhythmia, as well as a ventricular arrhythmia, the latter of which could put him at risk for sudden death.

A whole blood taurine level is recommended, and taurine supplementation (1000 mg BID) should be given if a deficiency is documented. A diet change would be warranted if Marshall is receiving one linked to the development of myocardial dysfunction.

PATIENT

Marshall Vaughan

Continued use of furosemide (1-2 mg/kg BID) appears to be warranted, as is therapy with enalapril (20 mg BID), pimobendan (10 mg BID), and spironolactone (37.5 mg BID).

A renal/electrolyte profile is recommended in 1-2 weeks. A recheck ECG is recommended in 3 months. A recheck echocardiogram is recommended in 6 months. Recheck radiographs are recommended any time clinical signs suggestive of congestive heart failure develop.

SPECIES

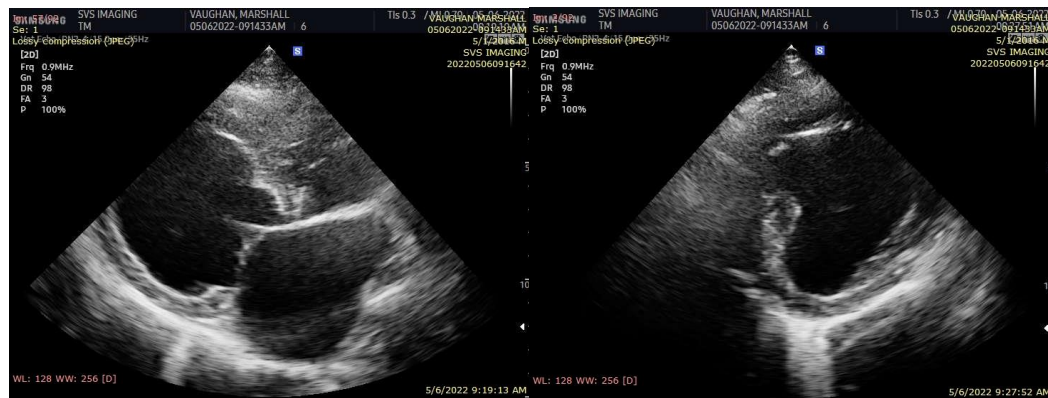
Canine

BREED

Pitbull Terrier

SEX

MN



AGE

6 y

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.

WEIGHT

87.4 lb

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.

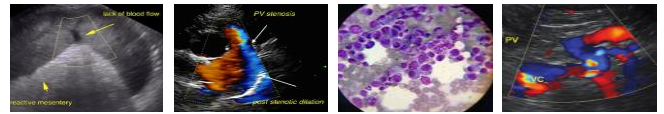
HOSPITAL NAME

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SVS Imaging CT

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Dr. Ridenour



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PATIENT

Marshall Vaughan

SPECIES

Canine

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AGE

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