


**PRESENTING CLINICAL SIGNS**

History: Grade IV/VI murmur. Dry cough. Some crackles. No increase in RR but increased effort at vet. Receiving hydrocodone 1.25 mg BID-TID.

**DATE**

12/29/22

**ECHOCARDIOGRAPHIC FINDINGS**

2D, M-mode, and Doppler study.

**PERFORMED BY:**

Shari Reffi, CVT

**INTERPRETED BY**

 Keith Blass, DVM,  
 MS, DACVIM  
 (Cardiology)

There is severe left atrial dilation. The mitral valve leaflets are thickened and exhibit systolic prolapse. A severe jet of eccentric mitral regurgitation is present. There is moderate left ventricular dilation. Left ventricular systolic function is hyperdynamic. The aorta and aortic valve appear normal, though trace aortic insufficiency is present. 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 moderate pulmonary hypertension (PG 52.8 mmHg). The pulmonary artery and pulmonic valve are normal. No heartworms are visualized. No pericardial effusion or cardiac masses are seen.

**PATIENT**

Kubby Davis

LA - 35.2 mm  
 LVIDd - 31.7 mm  
 LVIDs - 16.6 mm  
 FS - 47.6%  
 RA - 15.1 mm  
 LVOT - 1.05 m/s  
 RVOT - 1.00 m/s  
 TR - 3.63 m/s

**SPECIES**

Canine

**ASSESSMENT/RECOMMENDATIONS**

Degenerative mitral and tricuspid valve disease  
 Pulmonary hypertension

**BREED**

Mixed

This examination demonstrates regurgitation of blood across Kubby's mitral and tricuspid valves resulting from degenerative valve disease. Kubby's tricuspid valve disease is mild, as evidenced by his absence of secondary right heart chamber dilation. His mitral valve disease is significantly more advanced, as Kubby has severe mitral regurgitation present, with severe secondary dilation of his left atrium and moderate dilation of his left ventricle, as well as moderate secondary pulmonary hypertension. Given these findings, it's possible that mainstem bronchial compression could be contributing to Kubby's cough, and I am concerned that his pulmonary crackles could be due to the development of some degree of cardiogenic pulmonary edema.

**SEX**

MN

**AGE**

12 y

Thoracic radiographs are recommended to further evaluate Kubby's cough and pulmonary crackles.

**WEIGHT**

10.13 lb

I recommend starting Kubby on pimobendan (1.25 mg BID) and sildenafil (5 mg BID), as the former should help to slow the progression of his mitral valve disease, while the latter will treat his pulmonary hypertension. Should radiographs show the presence of pulmonary edema, additional therapy with furosemide (10 mg BID) and enalapril (2.5 mg BID) would be warranted.

Recheck radiographs and a renal/electrolyte profile are recommended in 1 week if furosemide and enalapril are started. A recheck echocardiogram is recommended in 6 months.

**HOSPITAL NAME**

American AH

**REFERRING VET**

Dr. Stockmal



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PATIENT

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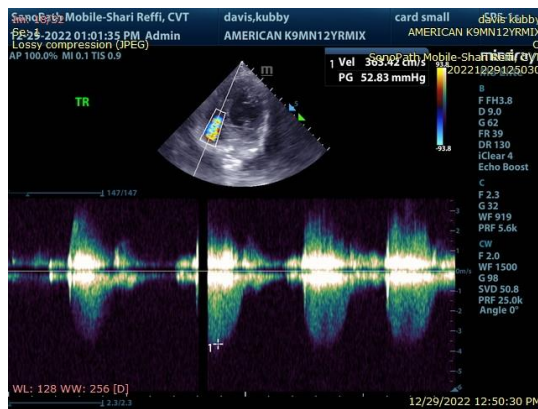
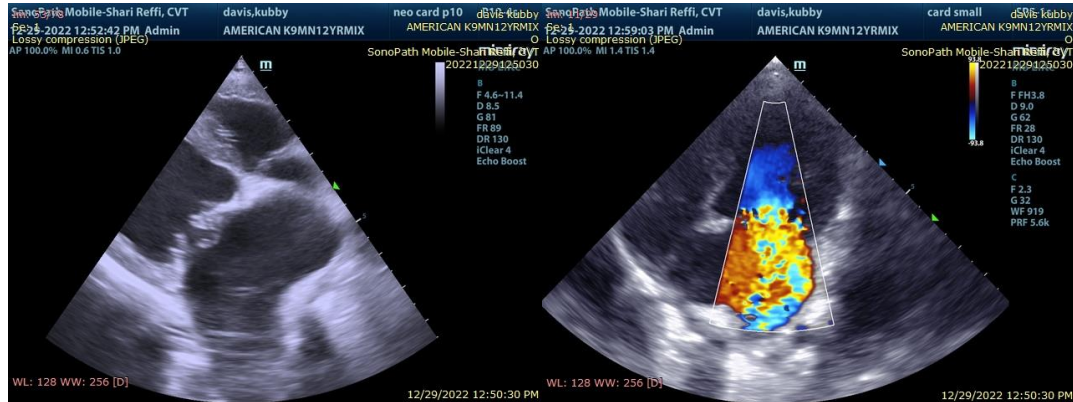
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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