



## PATIENT

Ruby Ireland

## SPECIES

Canine

## BREED

JRT

## SEX

FS

## AGE

16 y

## WEIGHT

13 lb

## INTERPRETED BY

Keith Blass, DVM, MS,  
DACVIM (Cardiology)

## IMAGING PERFORMED BY

Karen Ebersole, DVM

## HOSPITAL NAME

Scanvet

## REFERRING VET

Dr. Norman

## INVOICE

## DATE

11/6/25

## PRESENTING CLINICAL SIGNS

Presented for coughing. Grade 4-5/6 murmur. History of heart disease that was being treated with furosemide, pimobendan, and enalapril, but medications were stopped in July. Radiographs in September showed cardiomegaly and a redundant dorsal tracheal membrane.

## ECHOCARDIOGRAPHIC FINDINGS

2D, M-mode, and Doppler study.

There is mild to moderate left atrial dilation. The mitral valve leaflets are thickened and exhibit systolic prolapse. A moderate jet of mitral regurgitation is present. There is mild left ventricular dilation. Left ventricular systolic function is mildly hyperdynamic. 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 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 57.8 mmHg). The pulmonary artery and pulmonic valve are normal. No shunting lesions are visualized. No pericardial effusion or cardiac masses are seen.

ECG during echo: Sinus rhythm

LA - 32.9 mm  
LVIDd - 28.2 mm  
LVIDs - 11.6 mm  
FS - 58.9%  
RA - 20.5 mm  
LVOT - 1.40 m/s  
RVOT - 1.25 m/s  
TR - 3.80 m/s

## ASSESSMENT/RECOMMENDATIONS

Degenerative mitral and tricuspid valve disease  
Pulmonary hypertension

This examination demonstrates regurgitation of blood across Ruby's mitral and tricuspid valves resulting from degenerative valve disease. Ruby's tricuspid valve disease is mild, and appears to be well-compensated at this time. Her mitral valve disease is more advanced, as Ruby has mild to moderate secondary dilation of her left atrium and mild dilation of her left ventricle. Given the absence of more significant left atrial dilation, it's unlikely that mainstem bronchial compression is a primary contributor to Ruby's cough, and based on her radiographs from September, I suspect tracheal collapse is a more likely cause. Ruby's risk for the development of left-sided congestive heart failure is mildly to moderately increased, therefore, careful monitoring of her respiratory rate/effort is recommended.

Ruby's tricuspid regurgitation velocity is consistent with the presence of moderate pulmonary hypertension. This puts her at risk for the development of exercise intolerance and syncope, therefore, careful monitoring for these is recommended.

I recommend restarting Ruby on pimobendan (2.5 mg am, 1.25 mg pm), as well starting her on sildenafil (5 mg BID). As for Ruby's cough, a cough suppressant is recommended. Should the cough persist, consideration can be given to restarting Ruby on furosemide (6.25 mg BID) and enalapril (2.5 mg BID).



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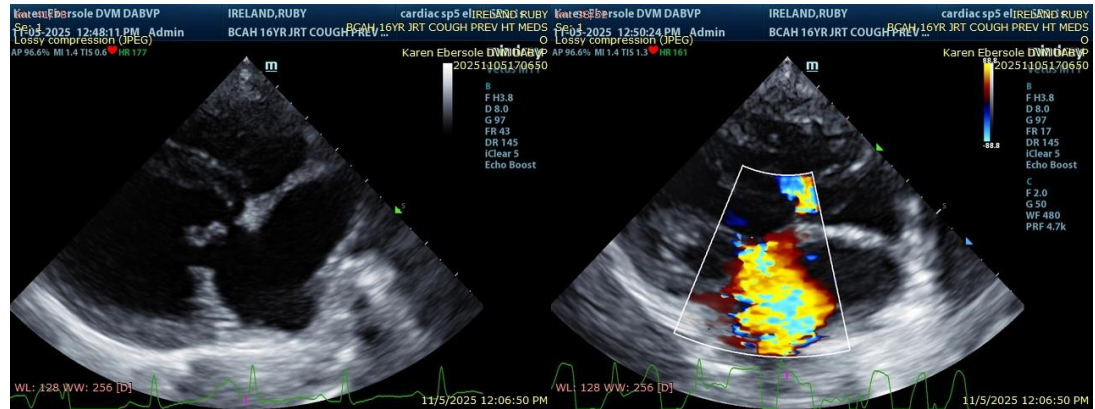
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A recheck echocardiogram is recommended in 6 months. Repeat radiographs are recommended if Ruby experiences difficulty breathing.



The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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)

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