



PRESENTING CLINICAL SIGNS

History: Weight loss. Bradycardia. Lateral radiographs showed mild generalized cardiomegaly.

DATE

ECHOCARDIOGRAPHIC FINDINGS

2/1/23

2D, M-mode, and Doppler study.

PERFORMED BY:

Amy Mayhew, LVT

INTERPRETED BY

Keith Blass, DVM,
MS, DACVIM
(Cardiology)

There is mild to moderate left atrial dilation. The mitral valve leaflets are mildly thickened, and a mild jet of mitral regurgitation is present. There is moderate left ventricular dilation. Left ventricular systolic function is hyperdynamic. The aorta and aortic valve appear normal, though there is mildly increased flow velocity in the ascending aorta (secondary to bradycardia), as well as very mild aortic insufficiency. Right atrial and right ventricular dimensions are normal. The tricuspid valve leaflets are mildly thickened, and a mild jet of tricuspid regurgitation is present. 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.

A bradyarrhythmia, concerning for the presence of high-grade AV block, is present during this exam.

PATIENT

Bo Trevino

SPECIES

Canine

LA – 60.7 mm
LA/Ao – 1.97
LVIDd – 65.0 mm
LVIDs – 32.0 mm
FS – 50.8%
RA – 35.8 mm
LVOT – 2.75 m/s
RVOT – 1.64 m/s

ASSESSMENT/RECOMMENDATIONS

BREED

Labrador Retriever

SEX

MN

AGE

9 y

WEIGHT

83.5 lb

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Dr. Kelli

Degenerative mitral and tricuspid valve disease
Bradyarrhythmia

This examination demonstrates mild regurgitation of blood across Bo's mitral and tricuspid valves resulting from degenerative valve disease. Also seen in this exam is a significant bradycardia, and I'm concerned that Bo could be experiencing high-grade second-degree or third-degree AV block. Bo has mild to moderate dilation of his left atrium and moderate dilation of his left ventricle, though it's unlikely that his mitral regurgitation is significant enough to be the sole cause, therefore, I suspect that Bo's bradycardia is contributing to his cardiac chamber dilation. Bo's radiograph shows that he is not in congestive heart failure, however, he is at risk for its development, and careful monitoring of his respiratory rate/effort is recommended. Bo's bradyarrhythmia also puts him at risk for the development of exercise intolerance and syncope, therefore, careful monitoring for these is recommended.

An ECG is recommended to further evaluate Bo's bradycardia. If AV block is present, an atropine response test (0.04 mg/kg IV followed by ECG 15-20 minutes later) is recommended to determine whether the block is vagally-mediated or due to AV nodal disease.

Recommended therapy for Bo's echocardiogram is pimobendan (10 mg BID). Recommended therapy for Bo's arrhythmia will depend on the results of his ECG +/- atropine response test.

A recheck echocardiogram is recommended in 6 months. Repeat radiographs are recommended if Bo experiences respiratory clinical signs.



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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.

PATIENT

Bo Trevino

Keith Blass, DVM, MS, DACVIM (Cardiology)
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631-804-5754

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