

### RESENTING CLINICAL SIGNS

DATE

9/13/21

History: Panting all the time, excessive water intake, irregular eating habits. Collapsed four days ago but came to quickly. PE – obese, tachycardic, irregular heart rhythm. ECG showed a few VPCs. Started on pimobendan (10 mg BID) and received 60 mg of sotalol, but the latter made Buddy sleepy.

### ECHOCARDIOGRAPHIC FINDINGS

PERFORMED BY:

2D, M-mode, and Doppler study.

Dr. Brian Barnes

INTERPRETED BY

Keith Blass, DVM,  
MS, DACVIM  
(Cardiology)

There is moderate left atrial dilation. The mitral valve leaflets are thickened, and a moderate jet of mitral regurgitation is present. There is moderate left ventricular dilation. Left ventricular systolic function is normal. The aorta and aortic valve are normal. Right atrial and right ventricular dimensions are normal. The tricuspid valve leaflets are thickened, and a mild jet of tricuspid regurgitation is present. TR velocity does not suggest the presence of pulmonary hypertension. 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.

ECG during echo: Atrial fibrillation with a single VPC

PATIENT

Buddy MacDonald

LA – 54.0 mm  
LVIDd – 53.4 mm  
LVIDs – 39.3 mm  
FS – 26%  
LVOT – 0.77 m/s  
RVOT – 1.04 m/s  
TR – 2.62 m/s

SPECIES

Canine

### ASSESSMENT/RECOMMENDATIONS

BREED

Retriever Mix

Degenerative mitral and tricuspid valve disease  
Atrial fibrillation  
Ventricular premature complex (VPC)

SEX

MN

AGE

9 y

WEIGHT

44.4 kg

This examination demonstrates regurgitation of blood across Buddy's mitral and tricuspid valves resulting from degenerative valve disease. Buddy has moderate mitral regurgitation present, with moderate secondary dilation of both his left atrium and left ventricle, though his left ventricular systolic function is normal. Given the presence of moderate left heart chamber dilation, Buddy is at risk for the development of left-sided congestive heart failure, and thoracic radiographs are recommended to evaluate for pulmonary edema as a possible cause of his panting. Buddy has mild tricuspid regurgitation present, with no secondary dilation of either of his right heart chambers.

Buddy's ECG shows that he is in atrial fibrillation, and he also had a single VPC during the study. It's possible that the sudden onset of atrial fibrillation could have been the cause of Buddy's collapsing episode a few days ago, and it's possible that the arrhythmia could be contributing to his panting. Alternatively, it's possible that Buddy could be experiencing an intermittently more severe ventricular arrhythmia that could have been the cause of his collapsing episode. Patients with atrial fibrillation are also at risk for the development of right-sided congestive heart failure, therefore, careful monitoring for the development of abdominal distension is recommended.

HOSPITAL NAME

Westview VH

Recommended therapy based on this exam includes pimobendan (10 mg BID) and diltiazem (45 mg TID), with the goal of antiarrhythmic therapy being a reduction of Buddy's average in-hospital heart rate to less than ~140 bpm. Should radiographs show the presence of pulmonary edema, additional therapy with furosemide (60 mg BID) and benazepril (20 mg BID) would be warranted. Consideration can also be given to an omega-3 supplement, as this has been shown to have some anti-ventricular arrhythmia effects in dogs.

REFERRING VET

Dr. Barnes



A recheck ECG and/or Holter monitor is recommended in two weeks. A renal/electrolyte profile is recommended in 2 weeks if furosemide and benazepril are started. A recheck echocardiogram is recommended in ~6 months.

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A recheck echocardiogram is recommended in ~6 months, sooner if new clinical signs compatible with cardiac dysfunction develop.

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PATIENT

Buddy MacDonald

SPECIES

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Retriever Mix

SEX

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AGE

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WEIGHT

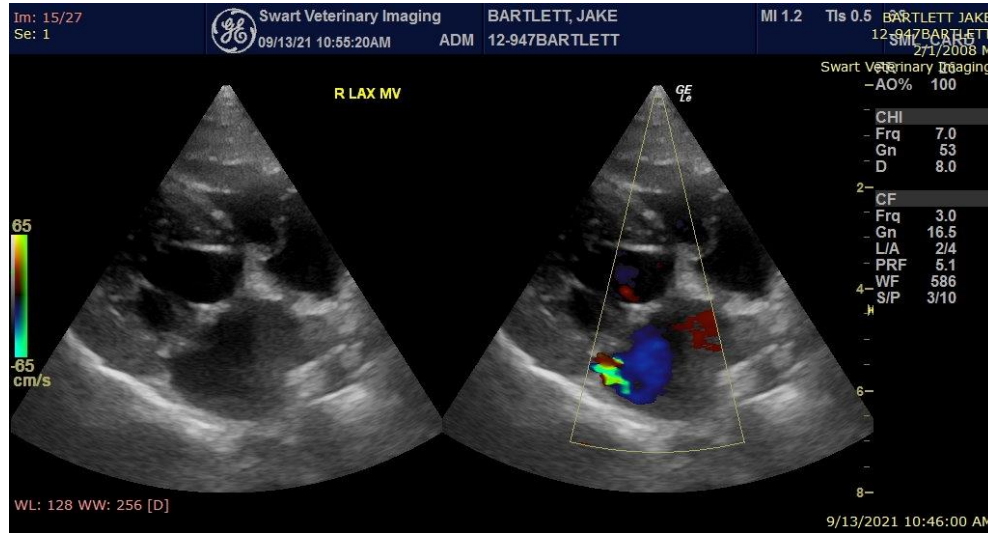
44.4 kg

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Dr. Barnes



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.

Keith Blass, DVM, MS, DACVIM (Cardiology)  
KeithBlass@gmail.com  
631-804-5754