


**PRESENTING CLINICAL SIGNS**

**DATE** History: Decreased exercise tolerance over the past 6 months. Was on a grain-free diet in the past, though not in the last 2 years. Periodically short of breath. No murmur. Irregular heart rhythm – ECG showed frequent VPCs with periods of trigeminy and couplets. BNP 1216. Sedated for exam with acepromazine and butorphanol.

7/13/22

**ECHOCARDIOGRAPHIC FINDINGS**

**PERFORMED BY:** 2D, M-mode, and color Doppler study.

Dr. Brian Barnes

**INTERPRETED BY**

Keith Blass, DVM,  
MS, DACVIM  
(Cardiology)

Left atrial size is normal. The mitral valve appears normal, though trace mitral regurgitation is present. Left ventricular dimensions are normal, as is left ventricular systolic function. The aorta and aortic valve are normal. 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 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.

**PATIENT**

ECG during echo: Sinus arrhythmia with intermittent VPCs

Ozzie Charlton

LA – 51.3 mm  
LVIDd – 47.7 mm  
LVIDs – 34.0 mm  
FS – 28.8%  
RA – 45.0 mm  
LVOT – 1.38 m/s  
RVOT – 1.00 m/s  
TR – 2.40 m/s

**SPECIES**

Canine

**BREED**

German  
Shepherd/Mastiff

**ASSESSMENT/RECOMMENDATIONS**

Degenerative tricuspid valve disease  
Ventricular premature complexes (VPCs)

**SEX**

MN

This examination demonstrates mild regurgitation of blood across Ozzie's tricuspid valve resulting from degenerative valve disease. The hemodynamic effects of the regurgitation also appear to be mild, as Ozzie does not have secondary dilation of either of his right heart chambers. As such, Ozzie's tricuspid valve disease appears to be well-compensated, and it does not appear to be contributing to his exercise intolerance or periodic shortness of breath.

**AGE**

9 y

The ECG recorded during Ozzie's echocardiogram demonstrates the presence of intermittent single VPCs. This arrhythmia is too mild to be the cause of Ozzie's clinical signs, however, given that a more severe arrhythmia was noted in a separate ECG, it's possible that this could be contributing to Ozzie's exercise intolerance and shortness of breath. As Ozzie's tricuspid valve disease is unlikely to be the cause of his arrhythmia, consideration should be given to cardiac conduction system disease, drug/toxin exposure, splenic/hepatic disease, and inflammatory/infectious/neoplastic disease as possible causes.

**WEIGHT**

60 kg

No therapy is recommended at this stage of Ozzie's tricuspid valve disease. Recommended therapy for his arrhythmia is sotalol (60 mg BID). Avoidance of high intensity exercise is recommended, as this could worsen Ozzie's arrhythmia.

**HOSPITAL NAME**

Westview VH

A recheck ECG is recommended in 2 weeks. A recheck echocardiogram is recommended in 6 months.

**REFERRING VET**

Dr. Barnes



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PATIENT

Ozzie Charlton

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.

SPECIES

Canine

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)

BREED

KeithBlass@gmail.com  
631-804-5754

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Shepherd/Mastiff

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