


**PRESENTING CLINICAL SIGNS**
**DATE**

History: One month history of progressive difficulty breathing. Intermittent episodes of shaking and heavy respiration. DCM2 genetic marker positive. Radiographs show cardiomegaly and some congestion. ECG shows intermittent VPCs. Some improvement with furosemide.

1/28/22

**ECHOCARDIOGRAPHIC FINDINGS**
**PERFORMED BY:**

2D, M-mode, and Doppler study.

Dr. VanCampen

**INTERPRETED BY**

There is moderate to severe left atrial dilation. The mitral valve appears normal, though mild mitral regurgitation is present. There is moderate left ventricular dilation. Left ventricular systolic function is severely depressed. The aorta and aortic valve are normal. Right atrial and right ventricular dimensions are normal. The tricuspid valve appears normal, though mild tricuspid regurgitation is present. TR velocity is consistent with the presence of mild pulmonary hypertension (PG 42 mmHg). The pulmonary artery and pulmonic valve are normal. No shunting lesions are visualized. No pericardial effusion or cardiac masses are seen.

 Keith Blass, DVM,  
 MS, DACVIM  
 (Cardiology)

ECG during echo: Sinus rhythm with occasional single monomorphic VPCs

**PATIENT**

Steele Caldwell

 LA - 63.3 mm  
 LVIDd - 58.0 mm  
 LVIDs - 53.1 mm  
 FS - 8.4%  
 LVOT - 1.00 m/s  
 RVOT - 0.74 m/s  
 TR - 3.25 m/s

**SPECIES**

Canine

**ASSESSMENT/RECOMMENDATIONS**
**BREED**

Doberman

 Dilated cardiomyopathy (DCM)  
 Pulmonary hypertension  
 Ventricular premature complexes (VPCs)

**SEX**

MN

**AGE**

4 y

This examination demonstrates severe depression of Steele's left ventricular systolic function, consistent with DCM. Given his breed and positive genetic test, it appears that Steele is suffering from a primary form of the disease, however, evaluation of his diet is still recommended to rule out a possible contributing factor from a diet-associated cardiomyopathy. Secondary to his myocardial dysfunction, Steele has moderate dilation of both his left atrium and left ventricle, as well as mild secondary pulmonary hypertension. Given this, it comes as no surprise that Steele appears to have experienced an episode of left-sided congestive heart failure (CHF). In addition to recurrent CHF, Steele is at risk for the development of exercise intolerance and syncope secondary to his mitral valve disease, therefore, careful monitoring for these signs is recommended.

**WEIGHT**

41.6 kg

Steele's ventricular arrhythmia appears to be fairly mild, however, careful monitoring for progression is recommended, as a more advanced arrhythmia could put Steele at risk for sudden death.

**HOSPITAL NAME**

Mississippi Mills AH

Recommended maintenance therapy at this time includes furosemide (80 mg BID), enalapril (20 mg BID), pimobendan (10 mg BID), and spironolactone (37.5 mg BID). No therapy is recommended for Steele's arrhythmia at this time given how mild it is in the submitted ECG, though consideration can be given to placing a Holter monitor to more comprehensively evaluate the severity of the arrhythmia.

**REFERRING VET**

Dr. VanCampen

Recheck radiographs and a renal/electrolyte profile are recommended in 1 week. A recheck ECG is recommended in 2-3 months. A recheck echocardiogram is recommended in ~6 months.

