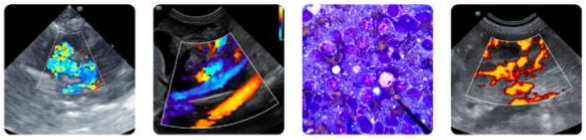



**PATIENT**

Razmakk Skinner

**SPECIES**

Canine

**BREED**

Schnauzer Mix

**SEX**

Neutered Male

**AGE**

12 Years 8 Months

**WEIGHT**

55 pounds

**INTERPRETED BY**

Sara Brethel DVM, DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Pet Care Clinic of the High Country

**REFERRING VET**

Dr. Russell

**INVOICE**

13710

**DATE**

02/11/26

## PRESENTING CLINICAL SIGNS

- P presented for cardiac workup, arrhythmia heard, chest rads concerning for MMVD

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO (M-Mode) | LA/AO (Heart Base; Swe) | FS (%) | EF (%) | EPSS (cm) |
|---|---|---|---|---|---|---|---|
| NORMAL PARAMETER | 4.5-5.5 | <2.7 | 1.3 | Up to 1.6 | 28-40 | 40-100 | <0.6 |
| PATIENT | 4.6 | 3.92 | 3.02 | 2.8 | 37.35 | 66.89 | NM |
| **CANINE CARDIAC PARAMETERS** | **HR** (BPM) | **AV VMAX** (m/s) | **PV MAX** (m/s) | **BODY WEIGHT** (kg) | **LAD** LA MAX 4 Chamber | **LVIDd** Avg; 2D and m-mode short axis (cm) | **LVIDs** Avg; 2D and m-mode short axis (cm) |
| NORMAL PARAMETER | 50-100 | 0.7-1.7 | 0.7-1.6 | | | | |
| PATIENT | 150 | 1.33 | 1.27 | 25.0 | 6.4 | 5.32 | 3.33 |

### *Cardiac Presentation*

The mitral valve leaflets are moderately thickened with moderate mitral regurgitation posteriorly directed. There is moderate prolapse of the mitral valve leaflets. The left atrial size is severely increased. Left ventricular internal dimensions during diastole are increased and systolic function is preserved in the face of mitral regurgitation. There is mild right atrial enlargement with mild tricuspid regurgitation. There is **no** prolapse of the tricuspid valve leaflets and moderate evidence of pulmonary hypertension based upon tricuspid regurgitant velocities. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonic valves have normal morphology and the corresponding outflow velocities are within normal limits. There is no evidence of pulmonic or aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion. There is trace pericardial effusion and an intracardiac mass is not identified.

### *ECG*

Sinus rhythm with sinus tachycardia and isolated monomorphic ventricular premature complexes.

## ULTRASONOGRAPHIC FINDINGS

- Degenerative valve disease.
- Severe left atrial enlargement.
- Scant pericardial effusion.
- Degeneration of the tricuspid valve with moderate pulmonary hypertension.

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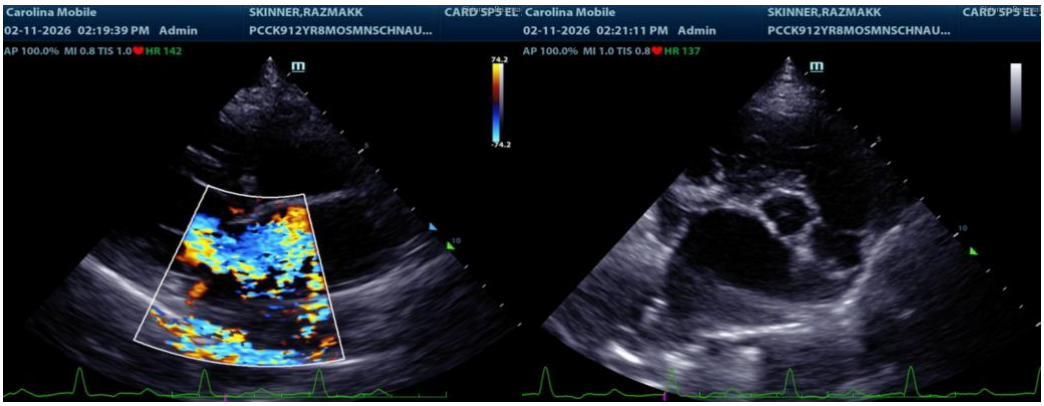
- VPCs.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient has degenerative valve disease and there is severe left atrial enlargement. While there is pericardial effusion in the absence of pulmonary edema, diuretic therapy is not recommended at this time. The patient should be started on Pimobendan and a dose of 0.3 to 0.32 mg/kg twice daily and close monitoring of the breathing rates is recommended.

Recommend ensuring full blood work is normal. The VPCs are likely due to the underlying cardiac disease, however, other systemic diseases can't be ruled out. Antiarrhythmic therapy is not recommended at this time. I would recheck the patient in three to four weeks, reassessing the rhythm and performing a thoracic scan to reevaluate the pericardial effusion. The client should start monitoring respiratory rate and effort at home if not already doing so. The resting respiratory rate should be < 35-40 breathes/minute when the patient is resting or sleeping. If the breathing rates are increasing, then chest radiographs are recommended.

If the patient develops cardiogenic pulmonary edema, diuretic therapy is recommended. I would not start therapy for the pulmonary hypertension at this time as it's likely secondary to severe left-sided disease. The Pimobendan may help optimize the condition, however, serial monitoring is needed as it can be progressive. I would do a recheck echo in two to three months. Due to the severity of the patient's condition, referral to a cardiologist can also be considered for long-term management.




**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.

Sara Brethel DVM, DACVIM (Cardiology)

info@SonoPath.com