



**PATIENT**

Tuula Magers

**SPECIES**

Canine

**BREED**

Poodle Mix

**SEX**

Spayed Female

**AGE**

16 Years

**WEIGHT**

15.9 Pounds

**INTERPRETED BY**

Sara Brethel, DVM,  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Dr. Andrea Nason

**HOSPITAL NAME**

Caravan Vet

**REFERRING VET**

Dr. Andrea Nason

**INVOICE**

35590

**DATE**

1/26/26

**PRESENTING CLINICAL SIGNS**

History: Tuula has a history of a grade 3 left systolic heart murmur of at least a year. She has a mildly elevated proBNP at 973. Echocardiogram today to evaluate for underlying heart disease, are cardiac medications recommended, and would she be a safe candidate for anesthesia for a dental procedure. She has been hypertensive since mid 2024 and is being managed with enalapril 2.5 mg once daily (recommended BID, owner has difficulty with PM medications).

Abnormal PE/Chem/CBC/UA Results: BNP 973 Crea 1.7, BUN 37, ALT 150, Na 159, K 5.8 T4 1.1

**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	~6.0	--	NM	1.43	37.93	--	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	NM	NM	NM	7.22	NM	2.9	1.8

**Cardiac Presentation**

The mitral valve leaflets are mildly thickened. There is no prolapse of the mitral valve leaflets. The left atrial size is normal. Left ventricular internal dimensions during diastole are within normal limits and systolic function is preserved. There is normal right atrial size. There is no prolapse of the tricuspid valve leaflets. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonic valves have normal morphology. There is no evidence of aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

**ULTRASONOGRAPHIC FINDINGS**

- Degenerative valve disease, ACVIM stage B-1

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**



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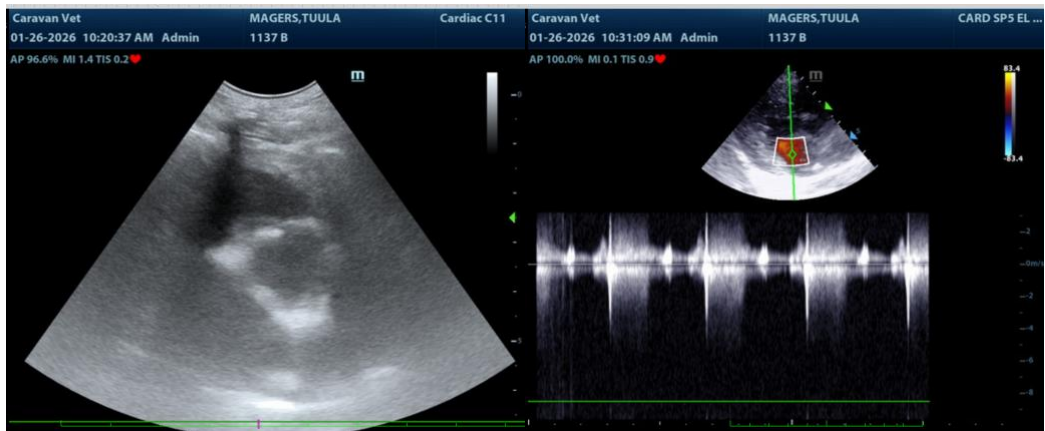
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The patient has degenerative valve disease ACVIM stage B1 and no cardiac medications are indicated at this time. Since this can be a progressive condition, serial monitoring is recommended. A recheck echocardiogram is recommended in 6 months. A sooner recheck is recommended if the patient develops cardiovascular clinical signs or the heart murmur is worsening in intensity. Elective anesthetic procedures should be well tolerated.

Especially with the history of the patient having systemic hypertension, recommend obtaining a blood pressure on the patient to ensure it is <160mmHg. If the blood pressure is elevated recommend following ACVIM guidelines for systemic hypertension and treating if indicated.

Standard perioperative fluid rates should be well-tolerated. Medications like dexmedetomidine and other alpha 2 agonists are best avoided. Ketamine is also best avoided. Anticholinergics can be used in the case of a clinically significant bradyarrhythmia (i.e., bradycardia with concurrent hypotension). If the patient is on an ACEi, recommend not giving this therapy the day of anesthesia.



**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)

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