



**PATIENT**

Alvin Bertuglia

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Male (Neutered)

**AGE**

11 years

**WEIGHT**

10 lbs.

**INTERPRETED BY**

R. McKenzie Daniel,  
 DVM, DABVP  
 (Canine and Feline)

**IMAGING PERFORMED BY**

Meghan Morse, LVT,  
 CVT

**HOSPITAL NAME**

Black River VH

**REFERRING VET**

Dr. Gano

**INVOICE**

10661

**DATE**

2/26/26

**PRESENTING CLINICAL SIGNS**

History:

- 1 year recheck MVD, pre anesthesia for routine dental
- Grade 3/6 LAS HM

**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	5.0	-	-	1.3	48	81	0.2
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LAD LA MAX4 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	1.4	0.8	10 lbs.	3.1	3.0	-

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal **left atrial** size based on 2 different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis with valvular prolapse. Doppler indicated measurable moderate eccentric MR (MR velocity 5.0 m/s). The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. Aortic valve insufficiency was noted on Doppler measuring 4.0 m/s). The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated mildly thickening with mild TR on Doppler. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible.



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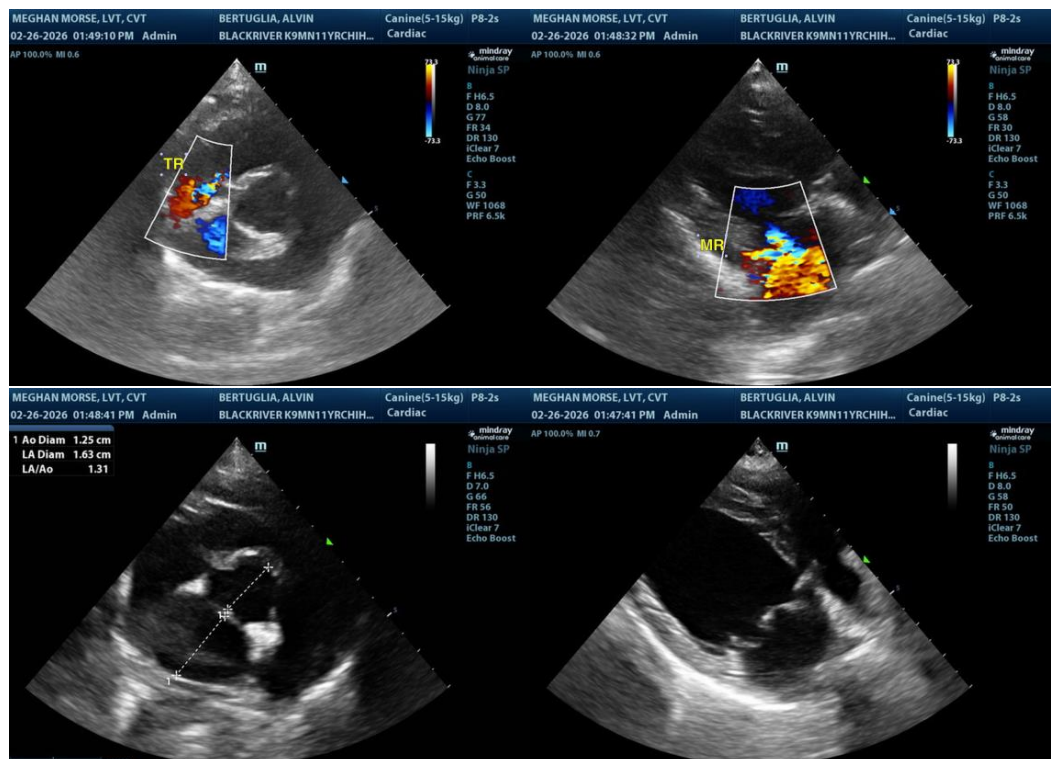
**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (B1)
- TV insufficiency – no overt clinical pulmonary hypertension
- Aortic valve insufficiency

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The persistent lack of LA enlargement indicates that the hemodynamic effects of the MR remain low. In a presumed nonclinical patient, no indication for cardiac medication at this stage. Prognosis remains variable and sonographic monitoring is advised. Recheck echocardiogram is suggested in 6 months, sooner if clinical signs arise. Assessment of systemic BP is recommended for evidence of hypertension, given aortic valve insufficiency. If the patient is normotensive, the anesthetic risk is considered low.

Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.





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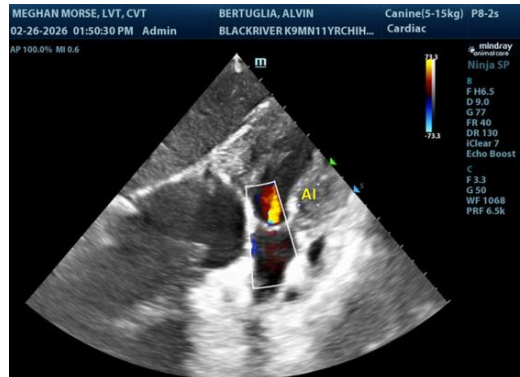
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
[info@sonopath.com](mailto:info@sonopath.com)