



**PATIENT PRESENTING CLINICAL SIGNS**

**Kobi Azeemu** Prev. US from 2/25 after systolic HM (2/6) diagnosed w/ Stage B2 Mitral valve disease. Started Vetmedin, Enalapril, Furosemide started in June. Follow up echo.

**SPECIES** Canine  
 Meds: Furosemide 12.5 mg 1/2 BID, Vetmedin 1.5mg/ml 0.4 ml BID, Enalapril 2.5 mg/ml 0.5 ml BID, Cardio drop supplements, Beneful Hips and Knees formula

**BREED**

Yorkie

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**SEX**

NM

**AGE**

14 years

**WEIGHT**

3 kgs

**INTERPRETED BY**

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

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	5.1			1.6	48	81	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	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	1.8	0.84		2.5	2.3	

**IMAGING PERFORMED BY**

Rebecca Hamilton

**HOSPITAL NAME**

BondVet Edgewater

**REFERRING VET**

Dr. Bortz

**INVOICE**

10290

**DATE**

11/4/25

**Cardiac Presentation**

The echocardiogram in this patient demonstrated mild increased **left atrial** size based on 2 different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis. Doppler indicated moderate eccentric insufficiency (MR velocity 5.1 m/s). The **left ventricle** presented mild increased dimension. 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. Normal measured LVOT velocity was noted with aortic valve insufficiency on Doppler (aortic valve insufficiency measured 4.5 m/s MAX). The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. 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. No evidence of arrhythmia was noted.



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**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (B2)
- Aortic valve insufficiency

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The mild increased LA / LV dimension without clinical issues such as left heart volume overload or LV systolic dysfunction indicates that the current and future risk of complications secondary to MR is mildly elevated. Overall, the heart appears to be compensated. Continued Vetmedin and ACE inhibitor medication at the current dose is recommended. There is no obvious indication for diuretic therapy at this stage. Discontinuation of diuretic therapy with clinical monitoring, as well as monitoring of resting respiration rate going forward, is suggested. Prognosis remains variable and sonographic monitoring is advised. Recheck echocardiogram is recommended in 6 months, sooner if recurrent or progressive clinical signs. If required, the anesthetic risk is considered mild. The following protocol is suggested.

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.

**INTERPRETED BY**

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 DVM, DABVP  
 (Canine and Feline)

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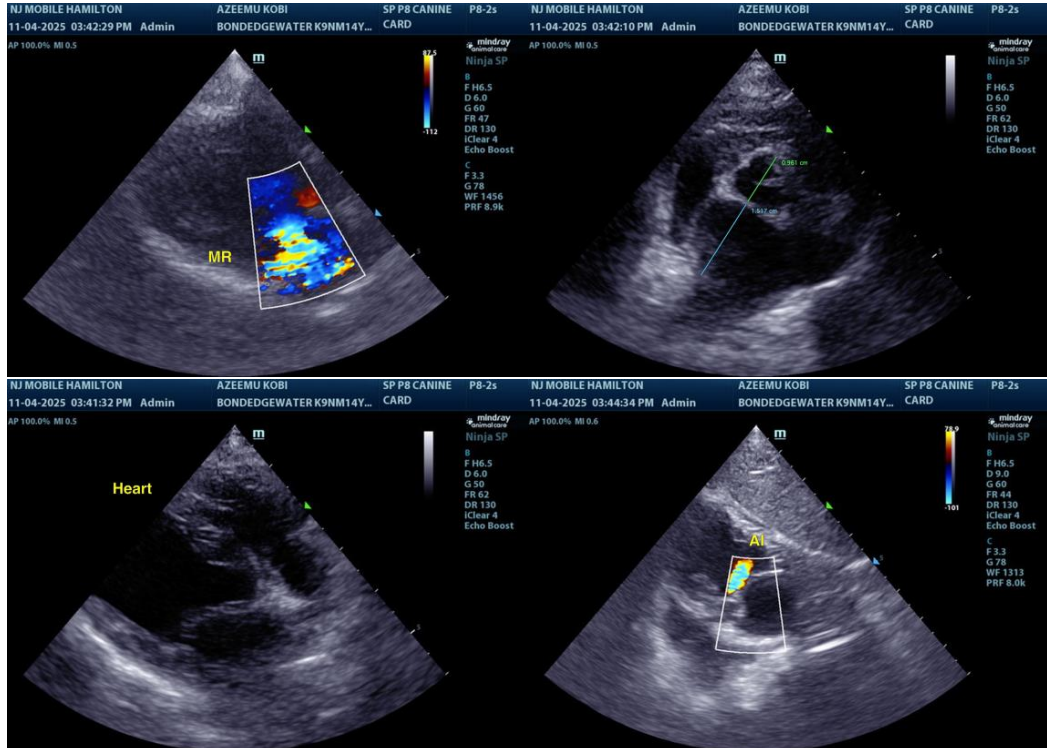
Dr. Bortz

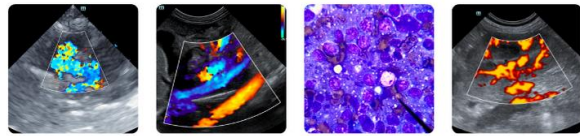
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**PATIENT**

Kobi Azeemu

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.

**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.

**BREED**

Yorkie

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)  
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