



**PATIENT**

Copper Ohea

**SPECIES**

Canine

**BREED**

Dachshund

**PRESENTING CLINICAL SIGNS**

- coughing
- grade 4-5/6 systolic murmur loudest on left side
- rads released LA/LV enlargement
- unstructured interstitial pattern
- hepatomegaly
- furosemide 12.5 mg BID started while pending echo
- Abnormal PE/Chem/CBC/UA Results: Glob 5.3, TP 9.0, ALKP 455, RBC 9.98, HCT 57.8, retic 163.0, mono 3.53, eos 1.66 , platelets 545k

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**SEX**

MN

**AGE**

12yr

**WEIGHT**

Pending

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	--	--	2.0	40	71	0.2
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	1.2	0.8	NA	4.5	3.7	--

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Chloe Lowe CVT

**HOSPITAL NAME**

Midland Park Veterinary Hospital

**REFERRING VET**

Dr Shikoku

**INVOICE**  
24089

**DATE**

03/02/2026

**Cardiac Presentation**

The echocardiogram in this patient demonstrated moderate increased left atrial size with mild interatrial septal deviation based on 2 different LA measurement methods. The cranial and caudal mitral valve leaflets presented thickening consistent with endocardiosis. Mild valvular prolapse. Doppler indicated moderate to significant eccentric insufficiency. The left ventricle presented thicknesses with linear contour and moderate increased LV 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. 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. No overt 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). Normal measured RVOT velocity with mild pulmonic valve insufficiency on Doppler measuring 2.3 m/s. No visible



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pericardial or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible. No evidence of arrhythmia or hepatic congestion.

**ULTRASONOGRAPHIC FINDINGS**

**SPECIES**

Canine

**Primary**

- Chronic mitral valve disease with mild valve prolapse (B2)
- Mild pulmonic valve insufficiency

**BREED**

Dachshund

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The degree of LA / LV enlargement indicates the current and future risk of complication secondary to MR and left heart volume overload is at least moderate. The coughing may be multifactorial in origin secondary to potential emerging left sided congestion, primary lower airway disease, or main stem bronchi irritation secondary to LA enlargement. Monitoring for clinical response to diuretic trial is recommended. Pimobendan 0.3 mg/kg PO BID is recommended. Concurrent respiratory support including antitussive medication may prove beneficial.

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The prognosis is considered guarded to variable going forward with sonographic monitoring advised. Recheck echo is suggested in 6 months, sooner if progressive clinical signs.

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Anesthetic risk considered at least moderate. 3-5 days of Pimobendan therapy prior to potential anesthesia is recommended. The following protocol is suggested with close monitoring and judicious IV fluid use. 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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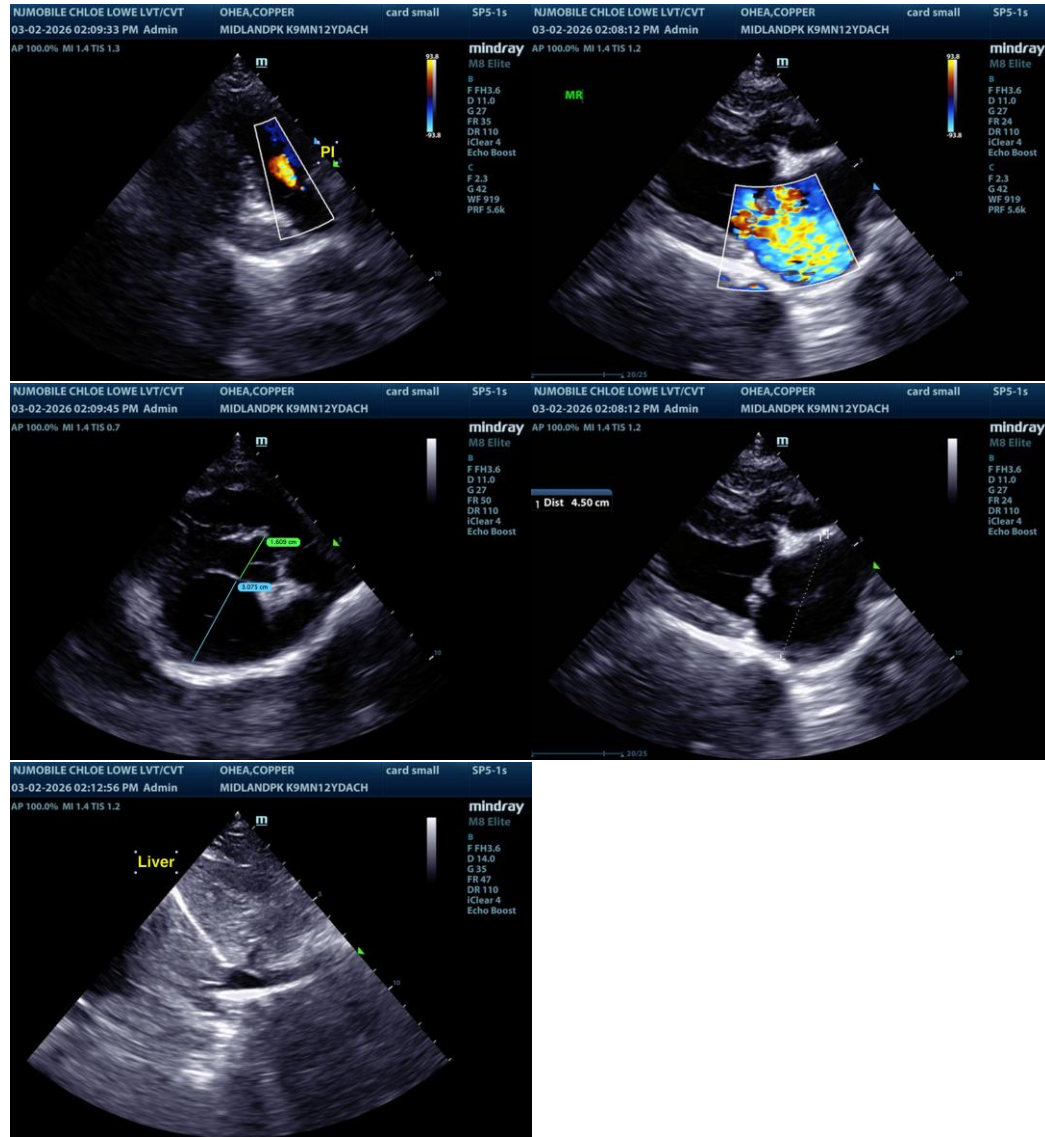
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 Veterinary Hospital

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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.

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