

**PATIENT**

Doby Daciuk

**SPECIES**

Canine

**BREED**

Pomeranian

**SEX**

Neutered Male

**AGE**

14

**WEIGHT**

17.2

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Sharkawy

**HOSPITAL NAME**

Union Vet Animal  
Hospital

**REFERRING VET**

Dr. Joseph

**INVOICE**

15220

**DATE**

04/17/26

**PRESENTING CLINICAL SIGNS**

Heart murmur grade 4/6. The pet was on pimobendane 1.25 0.5 tab SID

Abnormal PE/Chem/CBC/UA Results: Coughing sometimes Dental calculus Collapsed trachea Heart murmur grade 4-5/6

**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	--	<2.0	NM	1.7	45	78	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	NM	--	--	17.2	3.7	3.1	--

**Cardiac Presentation**

The echocardiogram in this patient demonstrated mild increased **left atrial** dimension based on 2 different LA measurement methods with mild intra-atrial septal deviation. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis with minor valve prolapse. Doppler indicated moderate eccentric insufficiency. 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. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated mild 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.

**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (B2).



**PATIENT**

Doby Daciuk

**SPECIES**

Canine

**BREED**

Pomeranian

**SEX**

Neutered Male

**AGE**

14

**WEIGHT**

17.2

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Dr. Sharkawy

**HOSPITAL NAME**

Union Vet Animal  
Hospital

**REFERRING VET**

Dr. Joseph

**INVOICE**

15220

**DATE**

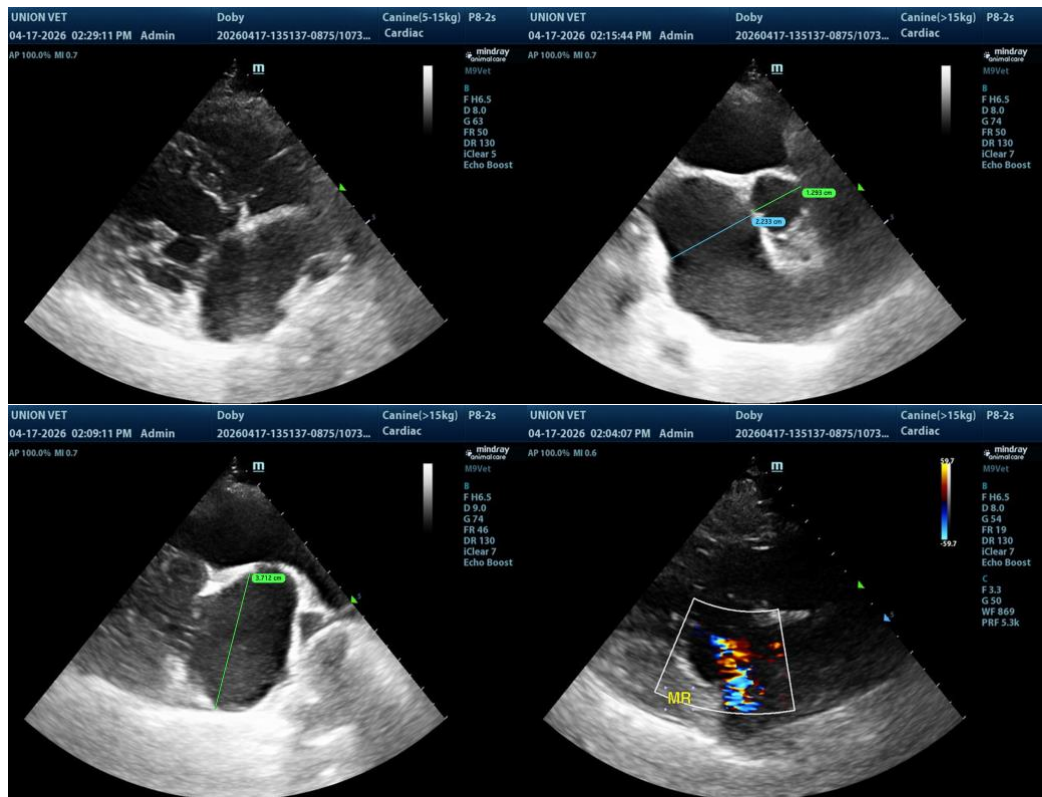
04/17/26

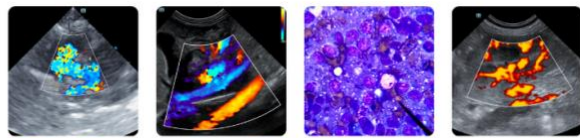
- Mild tricuspid regurgitation with mild tricuspid valve prolapse- no evidence of clinical pulmonary hypertension.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cause of the murmur is chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency. The left atrial enlargement implies that the risk of complication secondary to mitral valve insufficiency is elevated, yet overall the heart appears stable. No other clinical issues such as LV systolic dysfunction. Pimobendan 0.3 mg/kg BID is recommended. No overt indication for additional medication. Prognosis is considered variable and sonographic monitoring is recommended. Recheck echo cardiogram is suggested in 6 months, sooner if clinical signs arise.

Cardiac anesthetic risk is considered mild to moderate, yet likely mildly reduced once on Pimobendan for three to five days. If required, the following protocol is suggested with clinical monitoring and judicious IV fluid administration. 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.





## PATIENT

Doby Daciuk

## SPECIES

Canine

## BREED

Pomeranian

## SEX

Neutered Male

## AGE

14

## WEIGHT

17.2

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dr. Sharkawy

## HOSPITAL NAME

Union Vet Animal  
Hospital

## REFERRING VET

Dr. Joseph

## INVOICE

15220

## DATE

04/17/26



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)