



## PATIENT

Moose Aubry

## SPECIES

Canine

## BREED

Dachshund

## SEX

MN

## AGE

14y

## WEIGHT

18.2 lbs.

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Val Shumskaya

## PRESENTING CLINICAL SIGNS

Heart murmur 2/6 - needs clearance for dental procedure - severe periodontal disease

Current meds: Gaba, Galliprant, Clindamycin

Abnormal PE/Chem/CBC/UA Results: 4/17/23 - ALKP 231, Glob 4.8, Eos % 0.6, MCH 18, MCHC 27.9, PLT 523, PCT 0.44

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
<b>PATIENT</b>				1.2	43	78	0.18
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
<b>CARDIAC PARAMETERS</b>	(BPM)	<b>VMAX</b> (m/s)	<b>MAX</b> (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6				
<b>PATIENT</b>	134	1.4	1.0		2.6	2.1	

## Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 2 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented mild thickening consistent with endocardiosis. No evidence of valvular prolapse. Doppler revealed mild centralized MR. The **left ventricular** septum and free wall revealed adequate contractility and normal left ventricular volume, yet some echogenic remodeling of the septum and free wall were noted. This does not appear to be a functional issue at this point. This is most consistent with some level of **myocardial fibrosis**, which is an age related changes. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. Normal measured LVOT velocity with tract aortic insufficiency was noted on Doppler. The **right atrium** and auricle revealed normal size, structure, and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. No evidence of significant TR on Doppler. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). Normal measured RVOT velocity was noted. No visible **pericardial** or free pleura fluid was noted. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

## HOSPITAL NAME

Banfield PH of  
Bridgewater

## REFERRING VET

Dr. Baker

## INVOICE

17157

## DATE

6/27/23



## PATIENT

Moose Aubry

## SPECIES

Canine

## BREED

Dachshund

## SEX

MN

## AGE

14y

## WEIGHT

18.2 lbs.

## ULTRASONOGRAPHIC FINDINGS

- Compensated mitral valve regurgitation (ACVIM B1)
- Mild LV myocardial remodeling consistent with age-related changes
- Trace aortic insufficiency

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall, there was no evidence of significant structural or functional cardiomyopathy including no evidence of left or right heart chamber enlargement, LV systolic dysfunction, or clinical pulmonary hypertension. The cause of the murmur is consistent with mild MR. The lack of left atrium enlargement indicates that the current and future risk of complications secondary to MR at this stage is low. Assessment of systemic BP is suggested, given the presence of trace aortic insufficiency. No indication for cardiac medications. No overt anesthetic contraindications, assuming normal systemic BP. The following anesthetic protocol is recommended. Sonographic monitoring is required for further prognosis. Recheck echocardiogram is suggested in 6-8 months, sooner if clinical signs arise.

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

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

## IMAGING PERFORMED BY

Val Shumskaya

## HOSPITAL NAME

Banfield PH of  
Bridgewater

## REFERRING VET

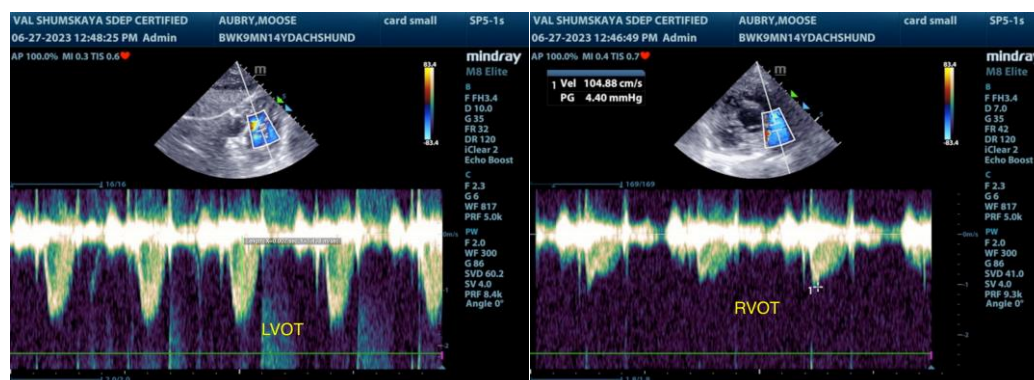
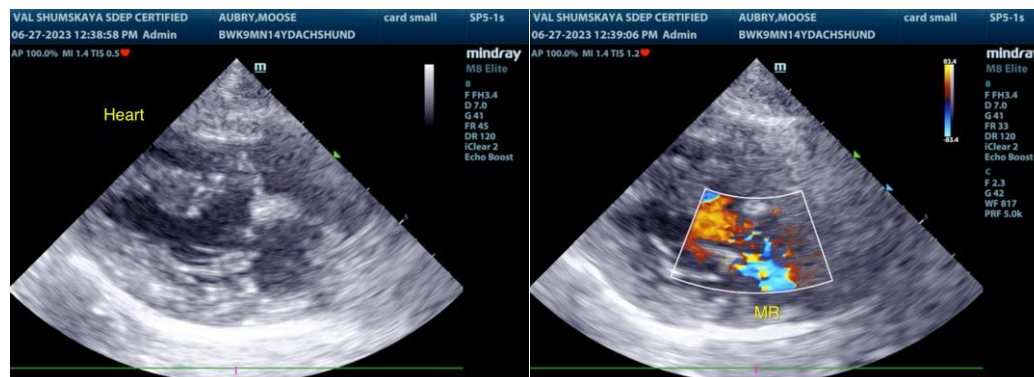
Dr. Baker

## INVOICE

17157

## DATE

6/27/23





## PATIENT

Moose Aubry

## SPECIES

Canine

## BREED

Dachshund

## SEX

MN

## AGE

14y

## WEIGHT

18.2 lbs.

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Val Shumskaya

## HOSPITAL NAME

Banfield PH of  
Bridgewater

## REFERRING VET

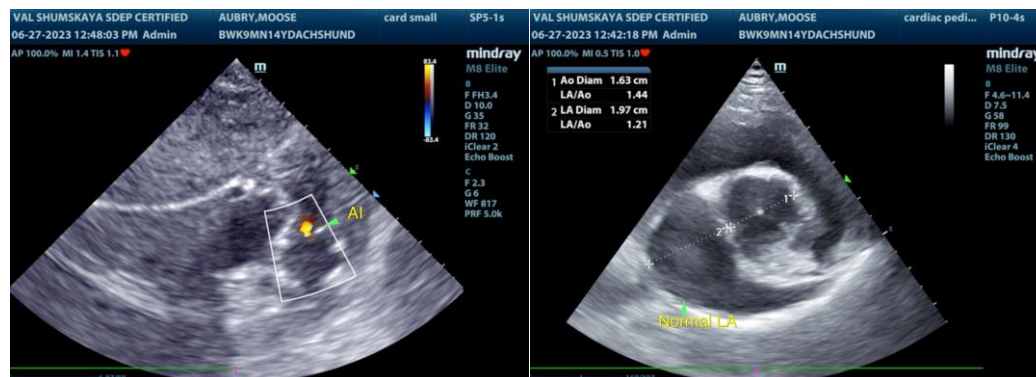
Dr. Baker

## INVOICE

17157

## DATE

6/27/23



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