



**PATIENT PRESENTING CLINICAL SIGNS**

Obie Sarmiento Pre-sx echo for dental. Coughing, cardiac enlargement on radiographs, no aud murmur. Current meds: Gabapentin 35mg bid

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Canine

**BREED**

Yorkshire Terrier

**SEX**

Neutered Male

**AGE**

11 Years

**WEIGHT**

Not Given

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			NM	1.39	84.7	49.7	0.18
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	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	110	1.0	1.0		2.2	1.93	

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. Minor eccentric MR was present on color doppler assessment. 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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. 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). 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. No evidence of arrhythmogenic disease.

**ULTRASONOGRAPHIC FINDINGS**

- Overtly normal cardiac structure and function
- Minor eccentric MR

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No evidence of structural or functional cardiomyopathy. Minor MR was present, yet not suspected to be audible. The hemodynamic effects of the MR are low at this time given the lack of left atrial enlargement, which indicates that the risk of current and future complication is low. No other clinical

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Shari Reffi, CVT

**HOSPITAL NAME**

Shohola Vet Hospital

**REFERRING VET**

Dr. DeMeo

**INVOICE**

34112

**DATE**

1/11/22



**PATIENT**

Obie Sarmiento

issues such as systolic dysfunction or evidence of clinical pulmonary hypertension were noted. Given the cardiac presentation, the cough in this patient appears to be non-cardiogenic in origin. Primary upper or lower airway disease may be considered. No indication for cardiac medications. Likewise, no overt anesthetic contraindications. Screening blood pressure is recommended prior to anesthesia. Recheck echocardiogram may be considered in 6-12 months, sooner if a cardiac murmur is detected. 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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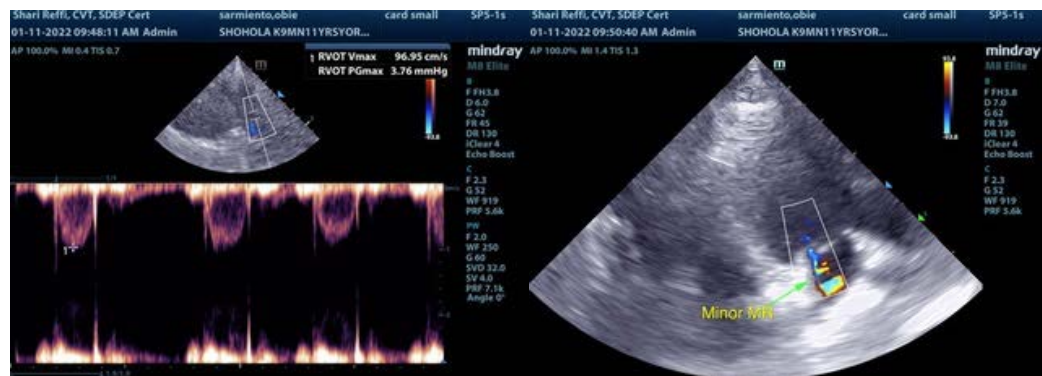
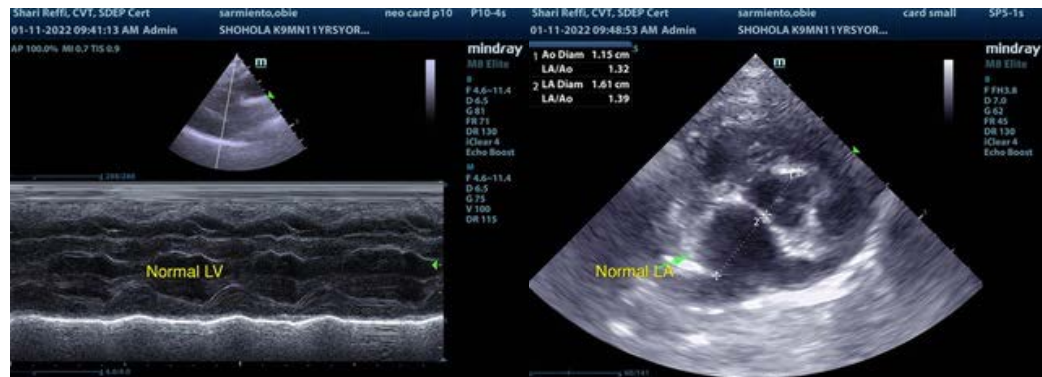
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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