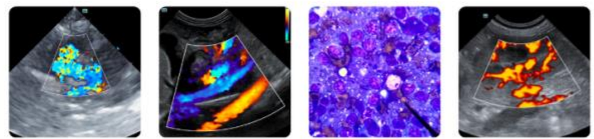
SonoPath

FOSTERING THE ART OF VETERINARY MEDICINE™



Clinical Sonography & Telecytology

Educational Teleconsultation Services™

SonoPath.com info@sonopath.com 1.800.838.4268

PATIENT

Lucky Delgado

SPECIES

Canine

BREED

Shih Tzu

SEX

Male

AGE

10

WEIGHT

19.2

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway Animal Hospital

REFERRING VET

Dr. Daly

INVOICE

12676

DATE

12/15/25

PRESENTING CLINICAL SIGNS

4/6 HM no pulse deficits, bounding pulses , 1 episode of syncope last night after coughing

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

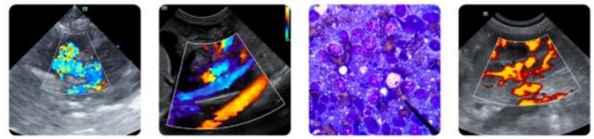
CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	--	--	NM	1.7	40	75	0.2
CANINE CARDIAC PARAMETERS	**HR** (BPM)	**AV VMAX** (m/s)	**PV MAX** (m/s)	**BODY WEIGHT** (kg)	**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	1.2	0.9	--	3.6	3.4	--

Cardiac Presentation

The echocardiogram in this patient demonstrated moderate increased **left atrial** size with mild deviated intra-atrial septum based on 2 different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis, valvular prolapse and lack of valvular coaptation. Doppler revealed severe eccentric MR. The **left ventricle** presented normal wall thickness with increased LV dimension and adequate LV systolic function. 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. 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). Normal measured RVOT velocity. No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible. No evidence of arrhythmia.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease with valve prolapse/lack of valve coaptation (ACVIM B2).
- Normal RA/RV.
- Normal pulmonary artery dimension.



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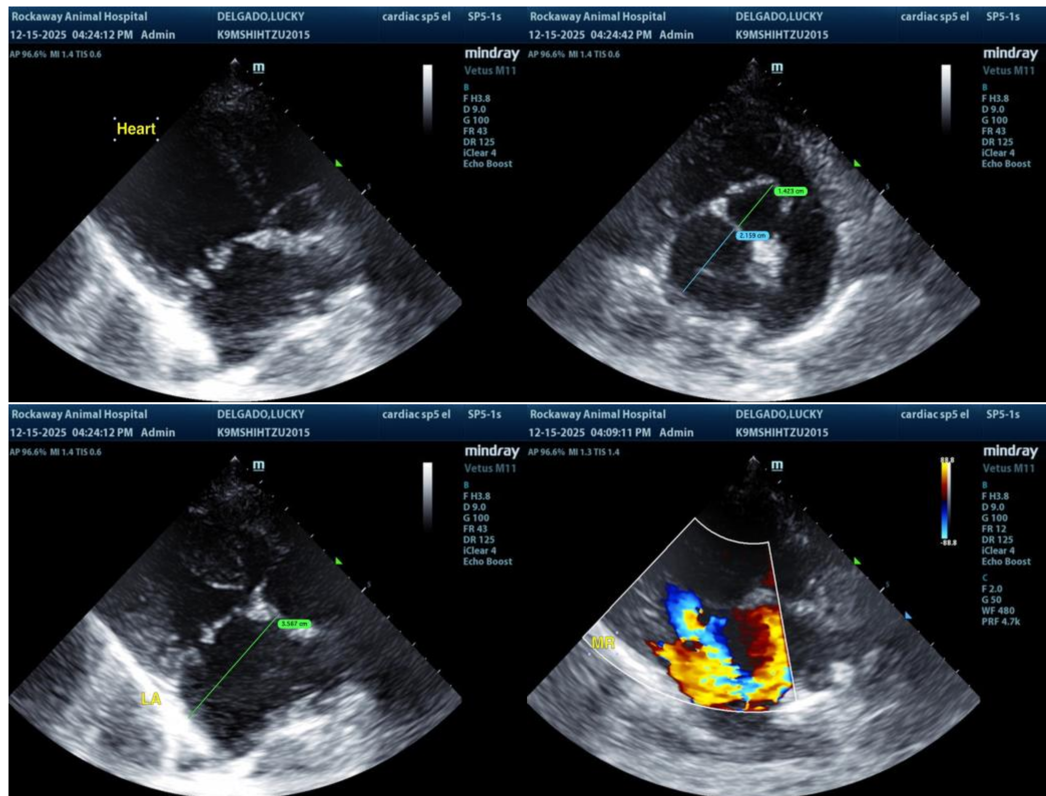
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The moderate increased LA dimension indicates the current and future risk of complication, secondary to MR, is at least moderately elevated with possible early stage left heart volume overload. No definitive evidence of clinical pulmonary hypertension. Three view chest radiographs to assess for evidence of concurrent lower airway disease is recommended. Pimobendan 0.30 mg/kg BID, weak diuretic Spironolactone 1.0 to 2.0 mg/kg BID, ACE inhibitor 0.50 mg/kg SID- titrating to BID is recommended. Serial monitoring of resting respiration rate going forward is advised. Prognosis is highly variable to guarded going forward with sonographic monitoring indicated. Recheck echo is recommended in 6 months or sooner if clinically indicated. Anesthetic risk is elevated yet likely mildly reduced once on Pimobendan for 3-5 days. If required, the following protocol is recommended with limited anesthetic time 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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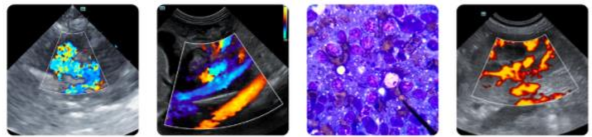

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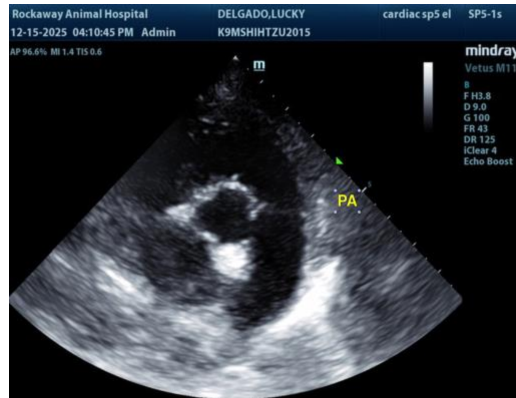

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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