



PATIENT

Max Todd

PRESENTING CLINICAL SIGNS

3/27/26- The owner reports that for the last couple of months, Max has been hacking off and on and sounds congested or "snorty" at times. He will also smack his lips occasionally.

SPECIES

Canine

4/6/26- anorexia the past few days but his belly looks "full"

BREED

Australian Blue Heeler
Mix

Abnormal PE/Chem/CBC/UA Results: Radiographs 3/27/26: - VD view shows a significant reverse D-shape to the cardiac silhouette, indicative of right-sided heart enlargement. The left side of the heart on this projection appears to be a normal size. - The vertebral heart score (VHS) is 11.5. VLAS 2.2 - There are very minor opacities in the lung fields near the carina

SEX

MN

AGE

11yr

WEIGHT

58lb

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	--	~ 1.0	--	1.1	28	54	0.5
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	--	1.0	58lb	3.8	3.8	--

INTERPRETED BY

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

Cardiac Presentation

IMAGING PERFORMED BY

Dr Ackmann

HOSPITAL NAME

Buffalo Veterinary
Clinic

REFERRING VET

Dr Ackmann

INVOICE
24389

DATE
04/06/2026

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 normal linear structure, extension in systole, and union in diastole with normal kinesis. No overt MR on Doppler. 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 borderline to mild subnormal as 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. Minor 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. No visible pericardial or free pleural fluid was noted. The cranial mediastinum and



PATIENT

Max Todd

SPECIES

Canine

BREED

Australian Blue Heeler
Mix

SEX

MN

AGE

11yr

WEIGHT

58lb

pericardial and extra-cardiac regions were free of masses in the visible window. No evidence of arrhythmia. No evidence of hepatic or vena cava congestion on brief hepatic sonographic assessment.

ULTRASONOGRAPHIC FINDINGS

Primary

- Structurally normal heart with borderline / mild LV contractility- age variant, athletic state, hypothyroidism, systemic disease may present in this manner, DCM criteria was not met
- Mild TV insufficiency with normal RA / RV / pulmonary artery size- not consistent with clinical pulmonary hypertension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of left or right congestive heart failure or clinical pulmonary hypertension. Potential respiratory and reported gastrointestinal signs appear non-cardiogenic in origin. No indication for cardiac medications with as needed respiratory and gastrointestinal support is recommended. A full abdominal ultrasound to assess for abdominal pathology is recommended. Recheck echo recommended in 6 months, sooner if clinically indicated.

Current cardiac anesthetic risk considered mild to moderate given borderline to mild LV hypocontractility. If required, the following protocol is suggested with close clinical monitoring. 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

Dr Ackmann

HOSPITAL NAME

Buffalo Veterinary
Clinic

REFERRING VET

Dr Ackmann

INVOICE 24389

DATE
04/06/2026



PATIENT

Max Todd

SPECIES

Canine

BREED

Australian Blue Heeler
Mix

SEX

MN

AGE

11yr

WEIGHT

58lb

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Dr Ackmann

HOSPITAL NAME

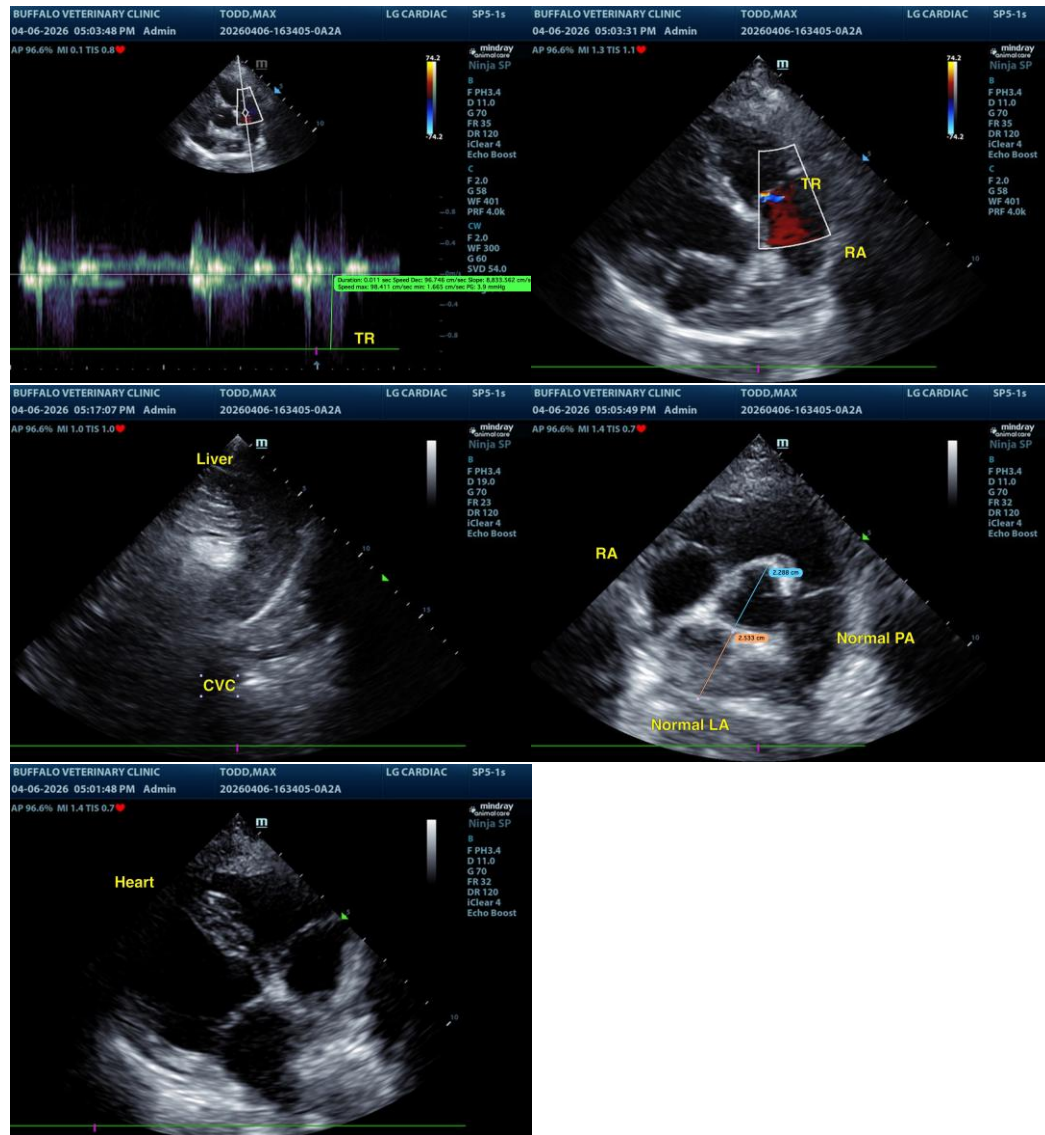
Buffalo Veterinary
Clinic

REFERRING VET

Dr Ackmann

**INVOICE
24389**

DATE
04/06/2026



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