



## PATIENT

Brutus Patterson

## SPECIES

Canine

## BREED

Labrador Retriever

## SEX

MI

## AGE

11yr

## WEIGHT

80lb

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Nicole Gottfredson,  
CVT

## HOSPITAL NAME

Buffalo Veterinary  
Clinic

## REFERRING VET

Dr Bessler

## INVOICE

24406

## DATE

04/06/2026

## PRESENTING CLINICAL SIGNS

- is having collapsing episodes approx every 15 days, happens if he is eating and then coughs or if he is laying on his back and then coughs. Coughing always seems to trigger it. Episode consists of head going dorsally and he gets stiff and legs crumble or he just falls on side. They last 30-60 secs and then he is up and normal. Temp 100.9, color pink CRT 2 sec, HR 78 no arrhythmias appreciated in a 4 minute window. Lungs clear. Abdomen palpates normal. LN normal. Bilateral yeast otitis with debris, unable to see eardrums. He did have one episode where he didn't collapse but had a head tilt and would walk to one side, this sounds like vestibular disease and by the next morning he was normal.
- CBC normal
- Chem normal
- Thyroid 1.2
- Recommend double cavity ultrasound with cardiologist report. May need to do halter monitor.

## 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	--	--	--	1.3	25	50	0.35
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	1.8	1.0	80	4.4	4.5	--

### 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 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 mildly subnormal as evidenced by the fractional shortening measurement. 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. Tricuspid valvular assessment demonstrated adequate linear morphology and kinesis. No overt 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



**PATIENT**

Brutus Patterson

**SPECIES**

Canine

**BREED**

Labrador Retriever

**SEX**

MI

**AGE**

11yr

**WEIGHT**

80lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Nicole Gotfredson,  
CVT

**HOSPITAL NAME**

Buffalo Veterinary  
Clinic

**REFERRING VET**

Dr Bessler

**INVOICE**

24406

**DATE**

04/06/2026

pleural fluid was noted. The cranial mediastinum and pericardial and extra-cardiac regions were free of masses in the visible window. No overt arrhythmia.

**ULTRASONOGRAPHIC FINDINGS**

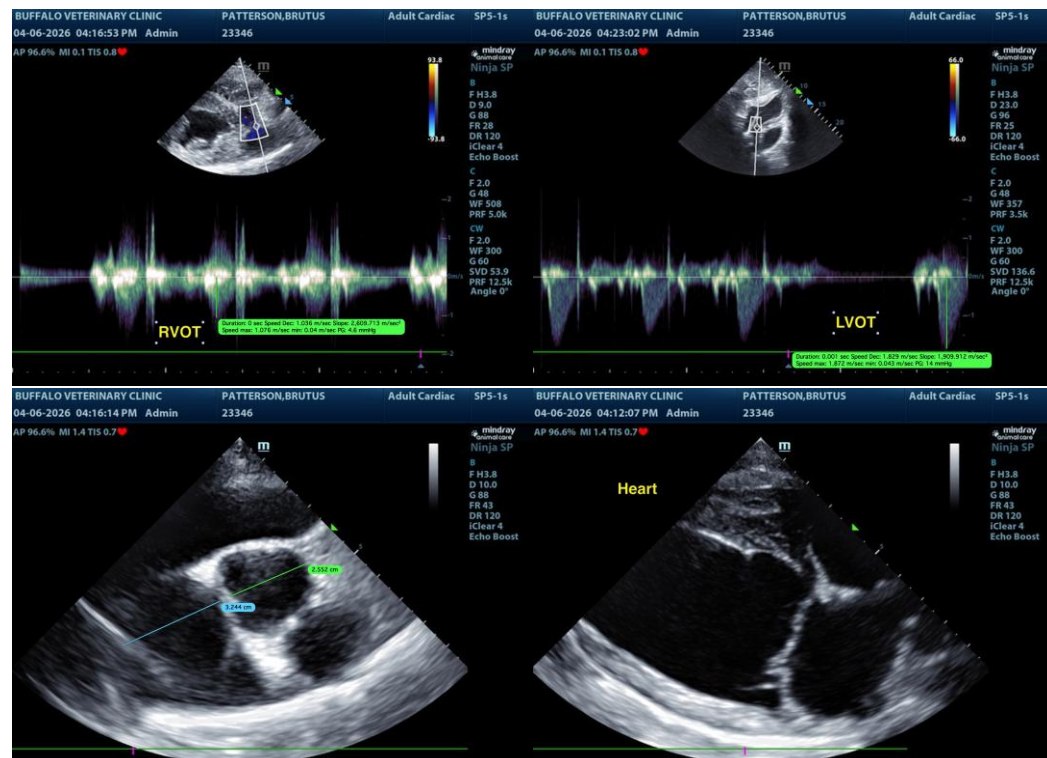
**Primary**

- Normal echocardiogram with mild LV hypocontractility- athletic state/ age-related variant, systemic disease, hypothyroidism all potentials. DCM criteria was not met.

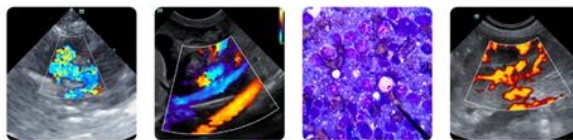
**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No evidence of structural cardiomyopathy, significant valvular insufficiency or pulmonary hypertension as a contributing factor. Full thyroid panel recommended given current T4 level. Further assessment may include Holter monitor to assess for non-obvious arrhythmia and correlation with neurological exam. No indication for cardiac medication despite mild to subnormal LV contractility which is non-specific and potential for patient variant or secondary to non-cardiac disease.

Cardiac anesthetic risk is considered mild. If required, the following protocol is suggested. 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.



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.



## PATIENT

Brutus Patterson

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.

## SPECIES

Canine

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
[info@sonopath.com](mailto:info@sonopath.com)

## BREED

Labrador Retriever

## SEX

MI

## AGE

11yr

## WEIGHT

80lb

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Nicole Gotfredson,  
CVT

## HOSPITAL NAME

Buffalo Veterinary  
Clinic

## REFERRING VET

Dr Bessler

## INVOICE

24406

## DATE

04/06/2026