



## PATIENT PRESENTING CLINICAL SIGNS

Baby Peden History: Grade 2-3 heart murmur, started have seizure like activity the beginning of March. Put on Lasix -lungs are now clear. Put on gabapentin for seizures.

## SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Chihuahua

SEX

Spayed Female

AGE

10 Years

WEIGHT

5.3 Pounds

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	<1.3	28-40	40-100	<0.6
PATIENT	--	--	--	1.9	48	83	0.24
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	NM	1.0	0.75	--	2.5	2.5	--

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Nicole Gotfredson

## HOSPITAL NAME

Buffalo VC

## REFERRING VET

Dr. Garry Gotfredson

## INVOICE

14699

## DATE

4/11/22

### Cardiac Presentation

The echocardiogram for this patient presented moderately excessive **left atrial size** based on two different LA measurement methods. Mild deviation of the intraatrial septum towards the right atrium, suggestive of increased left atrial pressure was present. The cranial and caudal **mitral valve** leaflets presented vegetative thickening consistent with endocardiosis with prolapse of the anterior mitral valve leaflet. Doppler indicated eccentric insufficiency. The **left ventricle** presented thicknesses with maintained linear contour with increased left ventricle volume. 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 or chamber overload. **Tricuspid** valvular assessment demonstrated concurrent thickening with mild prolapse of the septal leaflet. 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). No overt **pericardial** or free pleural fluid were noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

## ULTRASONOGRAPHIC FINDINGS



**PATIENT**

Baby Peden

- Chronic mitral valve disease (ACVIM B-2- possible emerging stage C) with anterior leaflet prolapse

**SPECIES**

Canine

- Concurrent mildly thickened tricuspid valve with septal leaflet prolapse

**BREED**

Chihuahua

- Moderate LA/LV enlargement

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cause of the murmur is secondary to chronic degenerative valvular changes with eccentric mitral valve insufficiency. The moderate LA/LV enlargement indicate that the current and future risk, going forward, for complication, is elevated. Potentially, cardiogenic pulmonary edema could be present, given this presentation.

**SEX**

Spayed Female

Pimobendan at 0.3 mg/kg PO BID +/- lowest effective dose of Lasix with radiographic monitoring of the lungs, monitoring of baseline resting respiration rate and serial sonographic monitoring for further prognosis would be appropriate. ECG recommended to assess for or rule out arrhythmogenic disease. No other clinical issues such as systolic dysfunction or obvious clinical pulmonary hypertension were present.

**AGE**

10 Years

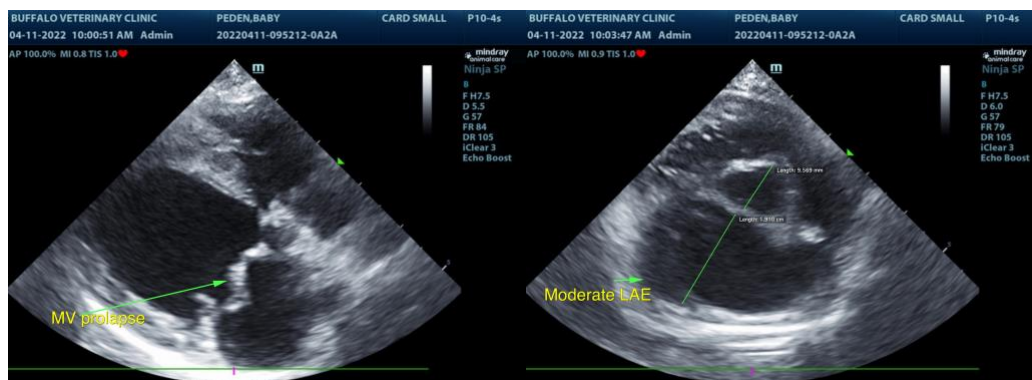
Monitoring of renal parameters, if consistent diuretic therapy, as well as assessment of systemic blood pressure suggested. Recheck echocardiogram suggested in 6 months or sooner if clinical signs, consistent with left sided congestion or clinical pulmonary hypertension are noted.

**WEIGHT**

5.3 Pounds

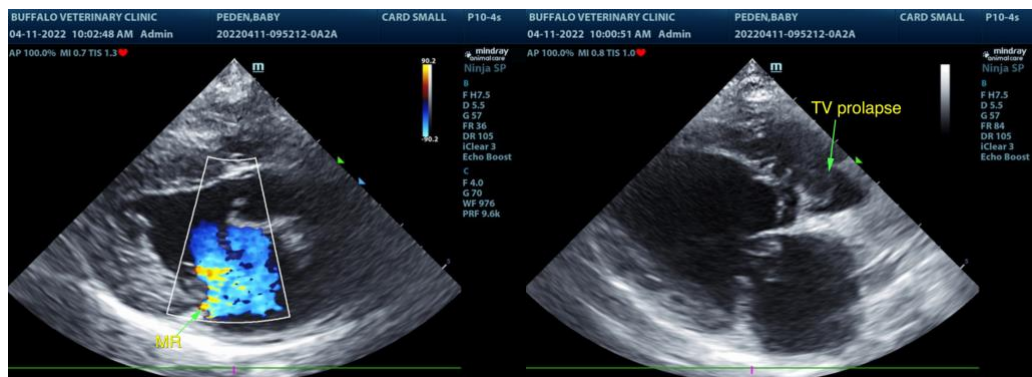
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I



**PATIENT**

can be of any further assistance please contact me.

Baby Peden

**SPECIES**

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
**info@SonoPath.com**

Canine

**BREED**

Chihuahua

**SEX**

Spayed Female

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