



## PATIENT PRESENTING CLINICAL SIGNS

**Pickles Latona** History: Patient presents for cardiomegaly, weakness in hind limbs, and decreased appetite. Current meds: Cerenia, natural support.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: CBC/CHEM/T4, Free T4/4DX all WNL.

Canine

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

### BREED

Pitbull Terrier

### SEX

Neutered Male

### AGE

10 Years

### WEIGHT

51.7 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	<1.6	28-40	40-100	<0.6
PATIENT	5.1	1.6	NM	2.3	27.8	57.8	0.44
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	BELOW	BELOW	BELOW	BELOW
PATIENT	Variable >200	1.3	0.74	--	5.9	5.36	--

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Kelly Vazquez

## HOSPITAL NAME

Legacy AH

## REFERRING VET

Dr. Kristine Potenzzone

## INVOICE

14605

## DATE

4/4/22

## Cardiac Presentation

The echocardiogram in this patient demonstrated moderate to severe **left atrial** enlargement based on 3 different LA measurement methods. Deviation of the intraatrial septum towards the right atrium was present, consistent with elevated left atrial pressure. The cranial and caudal **mitral** valve leaflets presented mild vegetative thickening suggestive of endocardiosis without evidence of valvular prolapse or tendineae rupture. Doppler indicated measurable significant eccentric insufficiency. The **left ventricle** presented normal 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 mildly 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 or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology with mild insufficiency on doppler. 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 visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. Significant consistent tachyarrhythmia was present. Subjective



## PATIENT

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assessment of the cranial abdomen and liver indicated potential for very subtle caudal vena cava and hepatic vein distention.

## SPECIES

Canine

- Significant eccentric MR, exhibiting LA/LV enlargement and mild LV systolic dysfunction
- Consistent significant tachyarrhythmia

## BREED

Pitbull Terrier

- Minor TR- estimated pulmonary pressure gradient not consistent with clinical pulmonary hypertension

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

## SEX

Neutered Male

The cardiac presentation is most suggestive of probable chronic degenerative valve disease, causing significant to severe mitral regurgitation which has progressed to significant left heart dilation and volume overload. Although not definitive, the consistent to significant tachyarrhythmia in this patient is suspected to be secondary to left heart volume overload with potential for concurrent tachycardia induced cardiomyopathy. ECG assessment strongly recommended for further clarification and to assess for atrial fibrillation, ventricular tachycardia, etc. While the structural disease predisposes to left sided congestion. The rapid arrhythmia predisposes to right sided congestion.

## AGE

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Consider hospitalization with cardiac stabilization and rate control therapy pending ECG assessment. From a structural standpoint, pimobendan at 0.3 mg/kg PO BID, spironolactone/Lasix combination at 1-2 mg/kg PO BID and as needed oxygen support, if clinically indicated, is recommended. If evidence of hypertension, ace-inhibitor at 0.5 mg/kg PO BID could be considered (not advised if blood pressure is <130). Rate control is likely of primary importance in this patient. ECG/cardiology consult is recommended. Pending stabilization, monitoring of heart rate, renal parameters and blood pressure likely indicated.

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Overall, very guarded to potential poor prognosis with high risk for episodes of congestive heart failure, syncope and persistent/progressive malignant arrhythmia.

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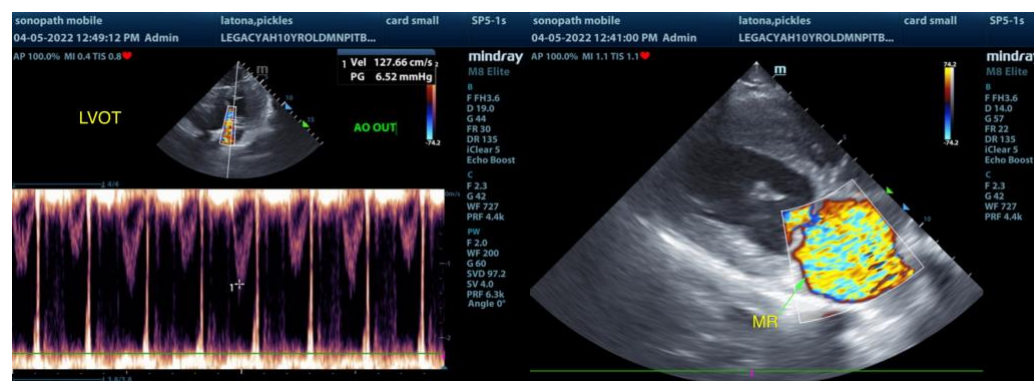
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**PATIENT**

Pickles Latona

**SPECIES**

Canine

**BREED**

Pitbull Terrier

**SEX**

Neutered Male

**AGE**

10 Years

**WEIGHT**

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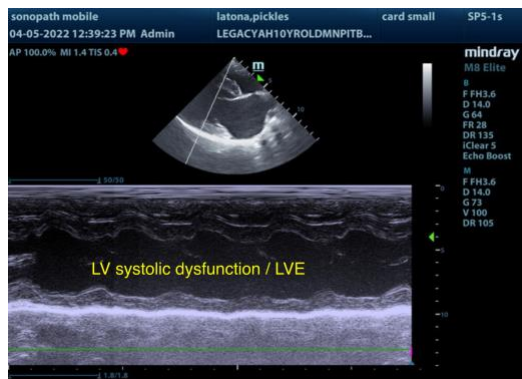
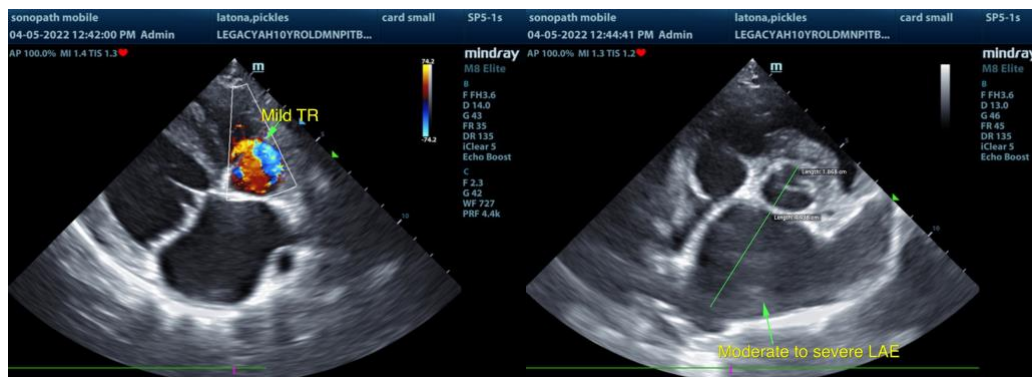
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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