



PATIENT PRESENTING CLINICAL SIGNS

Kramer Robinson 2/6 murmur, left systolic murmur; coughing; cardiomegaly. On lasix 20 mg bid per the radiologist
Radiographs: Left atrial enlargement.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Terrier X

SEX

Neutered Male

AGE

11 Years

WEIGHT

40.4 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	4.8	4.0	>2.5	3.0	45	76	0.3
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	143	1.73	1.3		5.0	4.68	

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Budd Lake AH

REFERRING VET

Dr. Horn

INVOICE

24912

DATE

8/25/21

Cardiac Presentation

The echocardiogram for this patient presented excessive **left atrial size** expressed both in the LA/AO and LA max measurements. cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. Volume overload noted in the **left ventricle**. **Contractility** was subnormal for this type of pathology. 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** insufficiency noted at 4.0 m/sec. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** insufficiency noted at 2.45 m/sec. Trace pericardial effusion noted. Arrhythmogenic activity noted. Lung rockets noted.

ULTRASONOGRAPHIC FINDINGS

- Severe volume overload left atrium and left ventricle with pulmonary hypertension and arrhythmogenic activity

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I'm concerned for sudden death in this patient. Significant left-sided volume overload present with concurrent pulmonary hypertension and slight pericardial effusion. Possible left atrial tear. The mitral insufficiency velocity, despite being properly aligned with low frequency, was subnormal, which would suggest hypotension. Blood pressure measurements warranted. Recommend aggressive triple therapy in this patient – Pimobendan 0.3 mg/kg BID, Lasix continued at 2-4 mg/kg BID, Spironolactone at 1-2 mg/kg BID, and ACE inhibitor 0.5 mg SID progressing to BID. Recheck echo in 7-14 days if the patient is able to survive this immediate episode. This patient is at high risk for sudden death. Sildenafil may be



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necessary based on recheck echocardiogram. Prognosis is extremely guarded.

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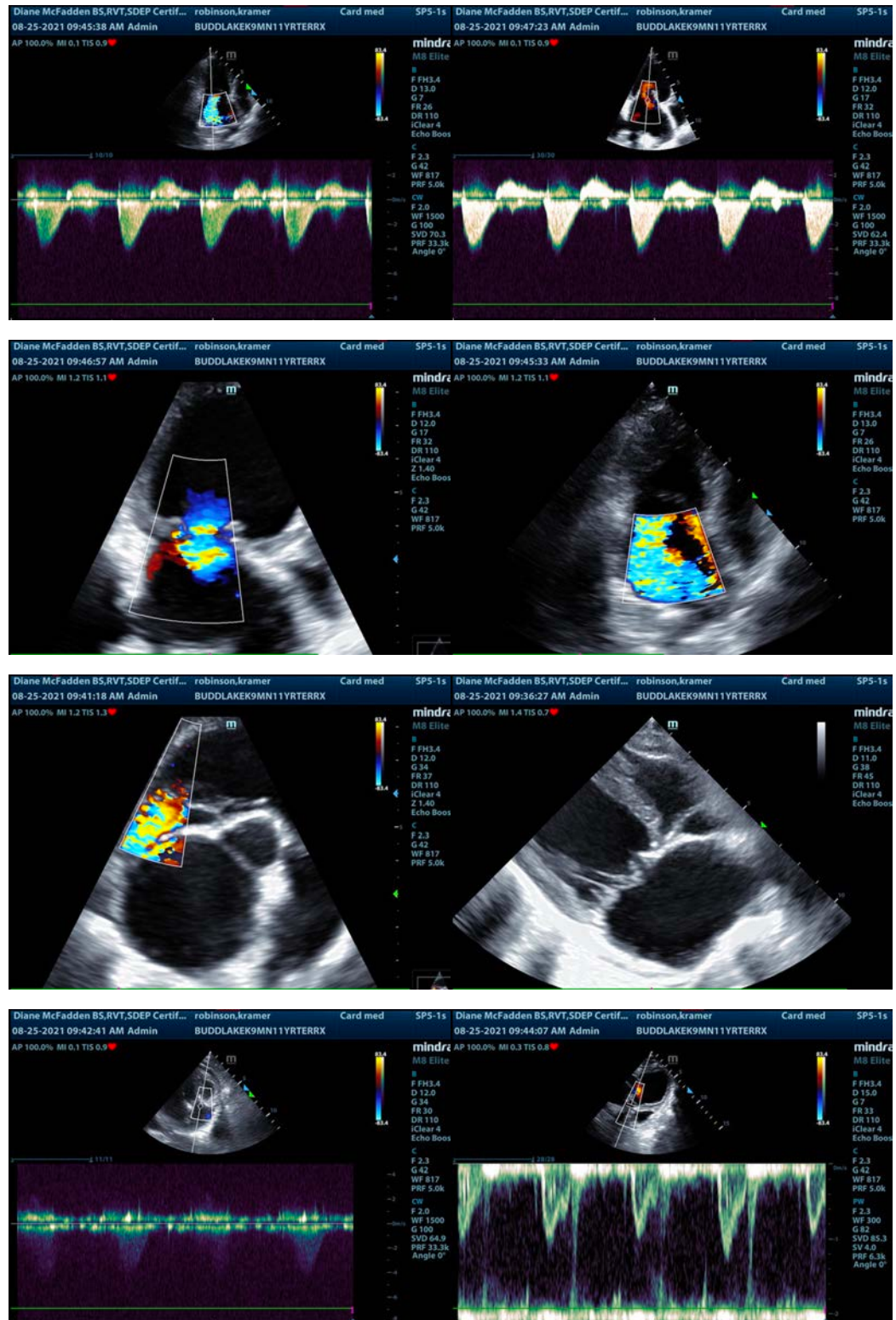
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PATIENT

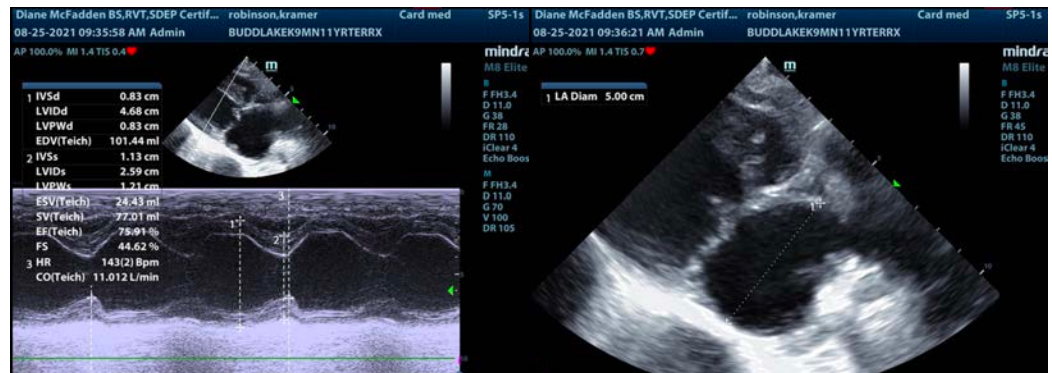
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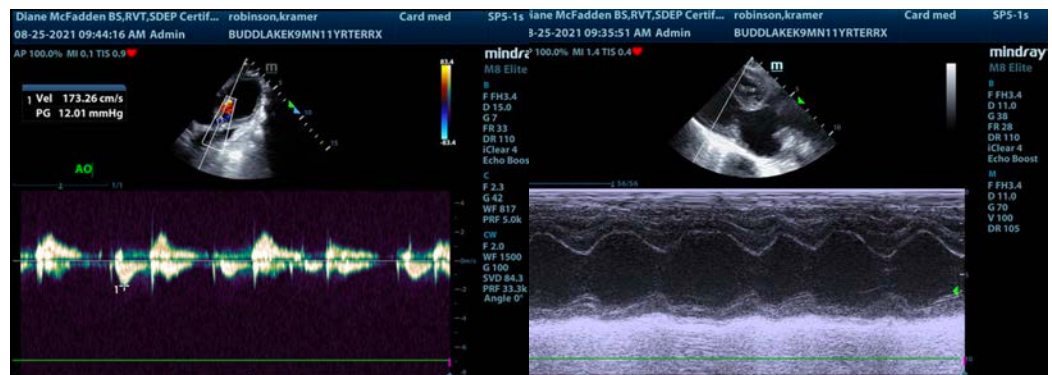
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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