



PATIENT

Bruiser Aumick

SPECIES

Canine

BREED

Beagle

SEX

Intact Male

AGE

12 Years

WEIGHT

38.6 Pounds

PRESENTING CLINICAL SIGNS

About 3 weeks on 3/31/23 ago owner presented Bruiser for possible seizures; heart murmur noted, rads showed enlarged heart. Started Pimobendan 5 mg x 1 am and 1/2 in pm, and furosemide 20 mg x 1/2 bid.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	6.2	3.6	1.8	2.1	45	77	0.2
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	150	1.4	0.9	17.5	2.9	4.5	2.5

INTERPRETED BY

Tam Mengine, DVM,
DABVP (canine/feline
practice)

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Advanced Veterinary
Care

REFERRING VET

Dr. Weingartner

INVOICE

22040

DATE

4/17/23

Cardiac Presentation

The **left atrium** is significantly enlarged, with no evidence of smoke or thrombus formation. The **left ventricle** is mildly increased in diameter with normal wall thickness and demonstrates good systolic function. The **right atrium** is subjectively of normal size and **right ventricle** dimensions and systolic function are subjectively normal. There is severe **mitral valve** regurgitation and mild **tricuspid valve** regurgitation noted, with irregular thickening of the valve leaflets. There is mild prolapse of the anterior leaflet of the mitral valve, but no evidence of chordae tendineae rupture in either valve, and no vegetative lesions were seen. The **aortic** and **pulmonary valves** both exhibit normal appearance and function. The **main pulmonary artery** appears normal. Tricuspid regurgitation velocities are consistent with moderate pulmonary hypertension. No pericardial/pleural effusion or cardiac masses are seen. There is no evidence of an arrhythmia.

ULTRASONOGRAPHIC FINDINGS

- Myxomatous mitral valve disease – Stage C. Myxomatous tricuspid valve disease. Moderate Pulmonary Hypertension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given that the patient is already on furosemide, it is likely that the moderately elevated left atrial size, moderately elevated pulmonary pressures, and mildly elevated left ventricular diastolic diameter would be further increased without diuretic therapy. Thus, it is likely that the patient has gone into congestive heart failure.



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- If the clinical signs are controlled, then continue furosemide and pimobendan at the current doses. If the sleeping respiratory is elevated (>30 breaths per minute), then consider increasing the furosemide dose to 20mg BID, and then as needed (up to 4 mg/kg TID) until signs are controlled.
- If renal values are normal, then the addition of an ACE inhibitor (enalapril at 0.5mg/kg q24h or benazepril at 0.25mg/kg q24h) and spironolactone (2mg/kg q24h) would also be recommended.
- The pulmonary hypertension is most likely secondary to congestive heart failure and does not warrant treatment unless syncopal episodes continue – it is preferable to control pulmonary pressures by treating the underlying cause whenever possible. If syncopal episodes persist, despite controlled congestive heart failure, then treatment with sildenafil at 0.5mg/kg BID – TID could be considered.
- Daily monitoring of the sleeping respiratory rate at home is recommended, and if the sleeping respiratory exceeds 35 breaths per minute, then a prompt recheck physical examination and chest radiographs to assess for pulmonary edema would be warranted.
- The patient may benefit from a cardiac diet such as Purina’s “CardioCare” veterinary diet. Salty treats should be avoided.
- If the patient is doing clinically well, then recheck echocardiogram is recommended in 6-8 months. MMVD is a progressive disease, and it can be expected that the patient’s disease will progress over time.
- Anesthesia should be avoided if at all possible. If an anesthetic procedure must be performed, then referral to a facility with a board-certified anesthesiologist or cardiologist on staff is recommended.

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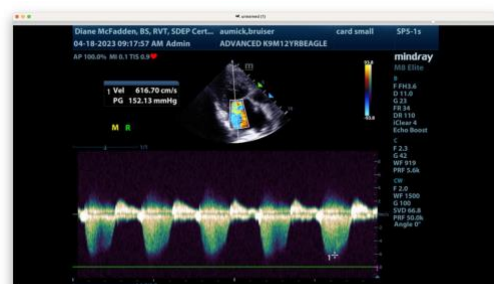
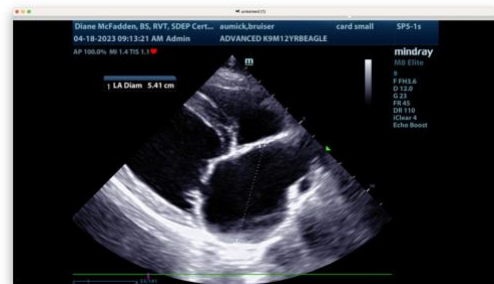
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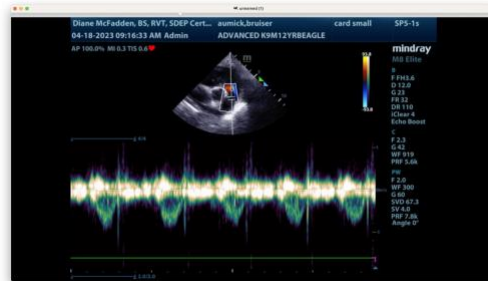
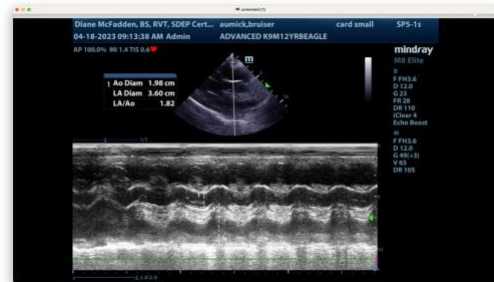
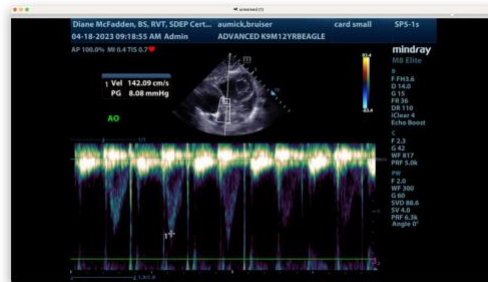
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Tam Mengine, DVM, DABVP (canine/feline practice)

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