

PATIENT

Buster McFerran

SPECIES

Canine

BREED

Shih Tzu X

SEX

Intact Male

AGE

10 Years

WEIGHT

7.8 kg

INTERPRETED BY

Sara Brethel, DVM,
 DACVIM (Cardiology)

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Acton VC

REFERRING VET

Dr. Farberman

INVOICE

35964

DATE

12/18/25

PRESENTING CLINICAL SIGNS

History: P presented on Dec 10th for not eating, vomiting, and not acting himself -Abdominal x-rays did not reveal anything too concerning besides gas in stomach and intestines, but a new grade 3-4 heart murmur (noted to be holosystolic and left sided) noted, which was not noted when Buster was seen in June 2025 -Thoracic radiographs taken, lungs clear but heart noted to be enlarged and globoid -P treated symptomatically for gastritis which has resolved and P is now eating and back to himself, but O would like heart murmur investigated -No symptoms present related to heart Current Medications None.

Abnormal PE/Chem/CBC/UA Results: See attached Primary Question to Be Answered in This Exam Why does patient have a heart murmur all of a sudden? Should he begin medication?

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	6.0	2.44	1.77	1.7	54.22	--	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	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	121	1.44	1.0	7.8	3.12	2.84	1.3

Chest Radiographic Interpretation

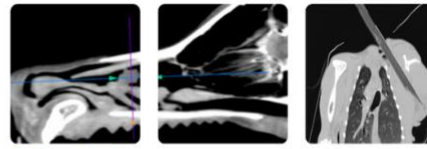
There is mild left atrial enlargement. The rest of the cardiac silhouette appears unremarkable. There is no evidence of cardiogenic pulmonary edema.

ECG Interpretation

Sinus rhythm

Cardiac Presentation

The mitral valve leaflets are mildly thickened with mild mitral regurgitation posteriorly directed. There is no prolapse of the mitral valve leaflet. The left atrial size is moderately increased. Left ventricular



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internal dimensions during diastole are within normal limits and systolic function is preserved in the face of mitral regurgitation. There is normal right atrial size with mild tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension based upon tricuspid regurgitant velocities. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonic valves have normal morphology and the corresponding outflow velocities are within normal limits. There is trace evidence of pulmonic insufficiency. There is no evidence of aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

ULTRASONOGRAPHIC FINDINGS

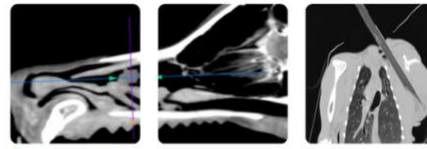
- Degenerative valve disease, ACVIM stage B-2
- Moderate left atrial enlargement
- Mild tricuspid regurgitation
- No significant evidence of pulmonary hypertension
- Normal sinus rhythm

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient has degenerative valve disease ACVIM stage B2 and pimobendan therapy at 0.27-0.32mg/kg PO q12 is recommended. This will be a lifelong therapy. A recheck echocardiogram is recommended in 4-6 months to monitor the condition since starting pimobendan. A sooner recheck is recommended if the patient develops cardiovascular clinical signs or the heart murmur is worsening in intensity. The client should start monitoring respiratory rate and effort at home if not already doing so. The resting respiratory rate should be < 35-40 breathes/minute when the patient is resting or sleeping. If the breathing rates are increasing, then chest radiographs are recommended.

Recommend obtaining a blood pressure on the patient to ensure it is <160mmHg. If the blood pressure is elevated recommend following ACVIM guidelines for systemic hypertension and treating if indicated.

Often times, degenerative valve disease murmurs do occur suddenly. I think the murmur is unrelated to the patient's previous clinical signs.



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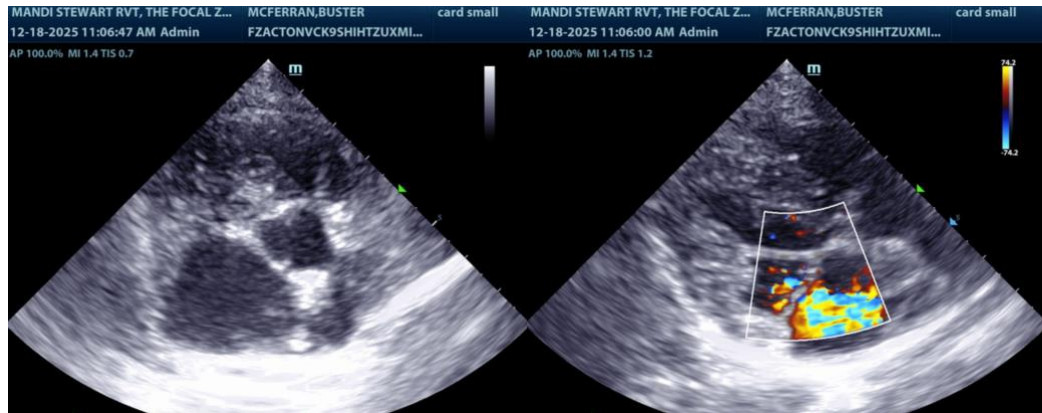
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Sara Brethel DVM, DACVIM (Cardiology)

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