



PATIENT

Zoey Schilz

PRESENTING CLINICAL SIGNS

History: Coughing, rapid breathing. Crackles auscultated on the left side of the chest. Grade 5/6 heart murmur (increase from a 2/6 in 12/2022)

SPECIES

Canine

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only.

Mild cardiomegaly with concern for CHF.

BREED

Teddy Bear

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with prolapse into the left atrial lumen. Suspect ruptured chordae tendinae (see below). Moderate to severe eccentric mitral regurgitation with moderate to severe left atrial dilation. Normal MR velocity. Borderline LV diameter with hyperdynamic myocardial function. The tricuspid valve appears normal with no obvious tricuspid regurgitation. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. Trace aortic and no pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

AGE

10 years

CARDIAC CHART

WEIGHT

9.8lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

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	5.4		1.8	2.0	56	88	0.16
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	130	0.9	0.5	4.4	2.3	2.7	1.2
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

IMAGING PERFORMED BY

Fred Gromalak, DVM

HOSPITAL NAME

SVS Imaging

REFERRING VET

Greendale Village Vet

INVOICE

29839

DATE

3/25/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing moderate to severe mitral regurgitation. There is evidence of a possible ruptured chordae tendinae, which likely explains decompensation to CHF. Moderate to severe LA dilation is noted without LV dilatoin, which is common with an acute issue like a chord rupture (ie not as significantly dilated as you might expect with organic CHF). This is the single scenario where CHF can be seen without severe cardiomegaly and is



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suspected in this case. A small aortic insufficiency is noted, and a baseline blood pressure is recommended. No additional issues are identified.

SPECIES

Canine

Given these findings, a ruptured chord leading to acute decompensation/CHF should be considered until proven otherwise. Coverage with broad spectrum antibiotics and maintaining the possibility of other primary respiratory issues should be considered if the response to Lasix is sub optimal. Continued full cardiac support is recommended as below in addition to supportive care/oxygen therapy as needed until stabilized.

BREED

Teddy Bear

Long term prognosis is poor, with an average survival time of 8-9mo for canine patients with active pulmonary edema on medications, however they generally are able to maintain a good quality of life for that period. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

SEX

Female Spayed

Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or worsening collapse episodes.

AGE

10 years

PLAN

WEIGHT

9.8lbs

Institute Lasix 1-2mg/kg PO q12h. Institute Pimobendan 0.3mg/kg PO q12h. Institute spironolactone 1-2mg/kg PO q12h. Institute cough suppression if needed. Consider coverage with broad-spectrum antibiotic if indicated.

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM
(Cardiology)

A renal panel and BP is recommended in 5-7 days to ensure tolerance of medications. If doing well and BP >130mmHg, institute ACEI 0.5mg/kg PO 12h.

Recommend recheck echocardiogram in 4-6 months to screen for progression, sooner if episodes persist or development of additional clinical signs.

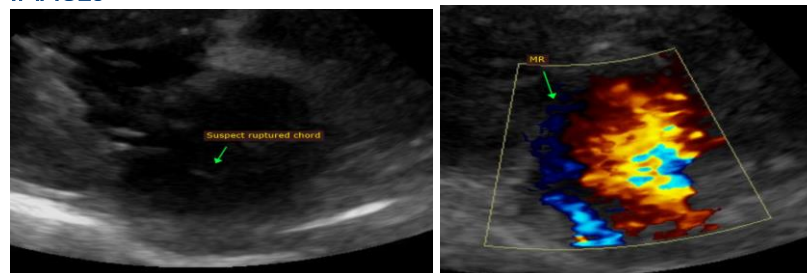
IMAGING PERFORMED BY

Fred Gromalak, DVM

IMAGES

HOSPITAL NAME

SVS Imaging



REFERRING VET

Greendale Village Vet

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.

INVOICE

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Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

DATE

3/25/23

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