



DATE PRESENTING CLINICAL SIGNS

1.12.26

PATIENT

Cosmo Ehrlich

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

9.18.11

WEIGHT

25.5lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Fullerton AH

REFERRING VET

Dr. Unger

INVOICE

46395

History: Presented 12/09 for a recheck of his cough. The owner reports the cough has been worsening over the past few months, describing it as sounding like a cat with a hairball. The cough was previously treated with antibiotics and prednisone, which provided temporary relief. The owner notes that rubbing the patient's neck can sometimes soothe the cough. The patient is blind but otherwise acts normally at home and is still playful. There is a history of trash-picking, and the owner is concerned he may have ingested part of an aluminum cat food lid. The owner also reports increased thirst and urination for the past six months. Appetite is good, and there is no vomiting or diarrhea. The patient is on a weight-management diet. He is currently receiving Optimune for keratoconjunctivitis sicca (KCS) and has a Seresto collar for flea prevention. He is not on heartworm prevention. The patient lives in a household with smokers. On exam no murmurs detected but harsh lung sounds, KCS.

-Pertinent abnormal PE/Chem/CBC/UA Results: Neutrophils 10.163 (3.004 - 9.741 K/ μ L), Platelets 552 (120 - 412 K/ μ L), BUN 33 (9 - 31 mg/dL), Potassium 5.5 (4.0 - 5.4 mmol/L), Na: K Ratio 27 (28 - 37), Chloride 103 (108 - 119 mmol/L), TCO2 (Bicarbonate) 28(13 - 27 mmol/L), ALP 201 (5 - 160 U/L), Cholesterol 361 (131 - 345 mg/dL), Specific Gravity 1.014 (1.030 - 1.098).

-CRX report: Possible mild LA dilation versus normal variant. Bronchial pattern.

-Current medications: Optimune, Hydrocodone 5mg 1/2 q6h PRN since 12/9/25.

-Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results: No previous.

-STAT: Not requested.

-Imaging performed by: Andi Parkinson, BS, RDMS.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Normal mitral valve leaflets with no prolapse into the left atrial lumen. No mitral regurgitation with no left atrial dilation. Normal LV diameter with adequate myocardial function. The tricuspid valve appears normal with trivial tricuspid regurgitation. Normal velocity. 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. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

CARDIAC CHART

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	NA	2.7	NM	1.3	48	80	NM
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	NM	1.4	1.0	11.6	1.5	1.9	1.0
*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)
				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)

<p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i></p> <p>Adapted from June Boon, Veterinary Echocardiography, 1998 Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435 Hansson et al, Vet Rad and Ultrasound 2002 Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995</p>	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)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

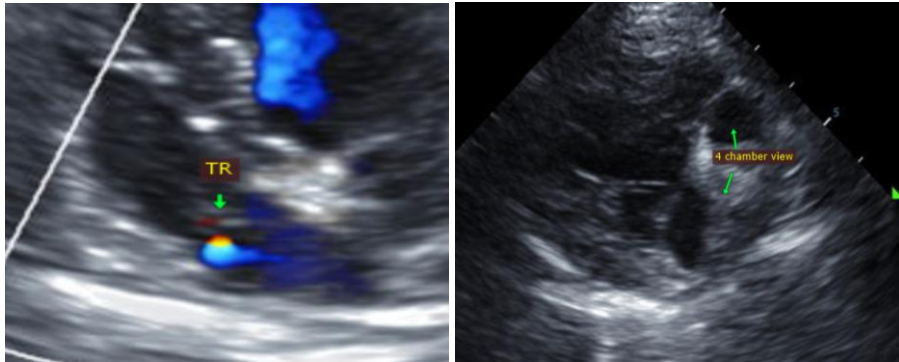
Overtly normal cardiac dimensions and function, with no obvious dysfunction or dilation of the left heart. No significant valvular leaks are visualized, and no evidence of pulmonary hypertension.

No cardiac medications are indicated at this time as the cough is certainly non-cardiac in origin. Continued work up for infectious/inflammatory respiratory causes is recommended. Options include Baytril or similar antibiotic, anti-inflammatory prednisone, aggressive hydrocodone, etc. If refractory, may consider TTW/BAL for further information.

Monitor for development of a heart murmur, acutely progressive cough, labored breathing, exercise intolerance or collapse episodes.

Chronic respiratory issues can lead to pulmonary hypertension if poorly controlled and a recheck echocardiogram is recommended should any exertional syncope/dyspnea occur, or a murmur be noted in the future.

IMAGES



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. 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.

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