



**PATIENT PRESENTING CLINICAL SIGNS**

Winnie Yerk History: Coughing for 2 months, pleural effusion, 2/6 heart murmur

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**SPECIES**

Feline

**BREED**

DSH

**SEX**

FS

**AGE**

14yr

**WEIGHT**

10.6

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT		NM	0.38	1.5	0.43	40	94
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
PATIENT		1.1	1.1	NM	1.0		

Adapted from June Boon, Veterinary Echocardiography, 1998  
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

**INTERPRETED BY**

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**IMAGING PERFORMED BY**

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**HOSPITAL NAME**

Lehigh Valley AH Bath

**REFERRING VET**

Dr. Tan

**INVOICE**

11400ag

**DATE**  
08/18/2022

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal left atrial size based on 3 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. The left ventricle presented normal thicknesses with linear contour and was not dilated nor restricted. The myocardium presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. Contractility of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions and angles of the myocardium. 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 valvular assessment demonstrated adequate linear morphology and kinetics. Minor TR present on Doppler (TR 1.6). The right ventricle was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. Pulmonic tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible pericardial free fluid was noted. A moderately sized cystic lesion containing anechoic fluid was present in the area of the cranial thorax measuring ~ 3.8 cm x 2.3 cm. No regional inflammation was observed. A small pocket of scant pleural free fluid noted adjacent to the heart in the visible window. The visualized lung appeared to be adequately aerated. No other additional pulmonary or thoracic nodules or lesions were noted.

**ULTRASONOGRAPHIC FINDINGS**

- Overtly normal cardiac structure and function
- Minor TR-no evidence of clinical pulmonary hypertension



**PATIENT**

Winnie Yerik

- Thinly walled cystic lesion in the cranial thorax/mediastinum
- Small pocket of very scant pericardial pleural free fluid

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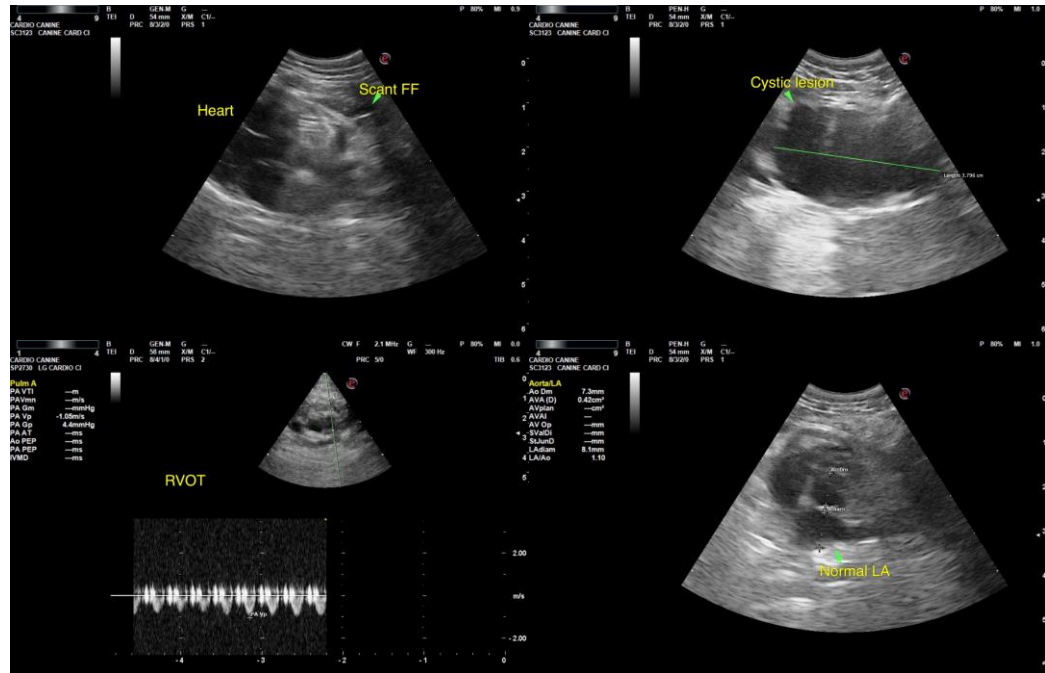
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No evidence of cardiomyopathy as a cardiogenic cause of the patient's coughing or scant pleural effusion. A definitive cause of the patient's murmur was not evident. A benign physiologic flow murmur is suspected. Regardless, the lack of left or right heart chamber enlargement indicate that the hemodynamic effects of the murmur are low. Considerations for the thorax lesion may include brachial cyst, lung inclusion cyst or similar. Less likely potential for abscess or neoplastic criteria. Concurrent primary lower airway disease given the presence of coughing such as inflammatory disease i.e. asthma, infectious disease or other is suspected. Correlation with cystic lesion fluid analysis cytology +/- C/S is recommended. No indication for cardiac medications. As needed respiratory support would be appropriate. Recheck echocardiogram if clinical signs of cardiac disease arise or if murmur intensity increases would be appropriate.



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.

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