PATIENT

Tess Sinclair

SPECIES

Canine

BREED

Wire Haired Daschund

SEX

FS

AGE

13 yrs

WEIGHT

4.63 kg

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Eldale VC

REFERRING VET

Turpin

INVOICE

10819

DATE

4/21/26

PRESENTING CLINICAL SIGNS

Seen at EVC for acute onset of retching cough that started Saturday, April 11th. Coughing persisted. Recheck at Eldale on 4/13/2026, did rads. Rad report findings: Suspect small volume pleural effusion with the concurrent impression of a mild bronchitis, although the bronchial changes could be associated with larger airway wall mineralization/age-related changes. There is no evidence of bronchopneumonia. Cardiovascular abnormalities are not defined. Suggest thoracic ultrasound to confirm the presence of pleural effusion and potentially to guide aspiration for cytology.

Current Medications- None

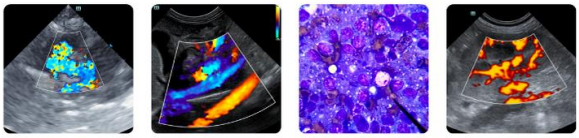
Abnormal PE/Chem/CBC/UA Results: CBC - elevation of WBCs neutrophils 10.62, monocytes 0.81, and eosinophils 4.88. Radiographic Findings As above Primary Question to Be Answered in This Exam Confirm presence of pleural effusion, potentially guide aspiration for cytology. Attached BW and rads

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	-	-	-	1.3	45	78	0.1
CANINE CARDIAC PARAMETERS	**HR** (BPM)	**AV VMAX** (m/s)	**PV MAX** (m/s)	**BODY WEIGHT**	**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	NM	1.1	0.7	4.63 kg	2.5	2.2	-

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 2 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. No evidence of MR on Doppler.
The **left ventricle** presented 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 of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and



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subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. No evidence of TR or pulmonary hypertension. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window. No evidence of arrhythmia or hepatic congestion was noted. Pericardial and left and right thoracic lung was aerated without evidence of pericardial or lateral thoracic pulmonary comet tail artefact or visible pleural effusion. There is no evidence of peripheral pulmonary nodules or space-occupying lesions.

ULTRASONOGRAPHIC FINDINGS

- Normal cardiac structure / function
- Sonographically unremarkable aerated pericardial and left / right lung

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no evidence of structural or functional cardiomyopathy or pulmonary hypertension as a contributing factor to the respiratory signs. There is no sonographic evidence of pulmonary pathology or overt pleural effusion in the visible left and right thoracic window. However, primary pulmonary disease is likely, in conjunction with lack of cardiomyopathy. Intrapulmonary / pulmonary changes may not be visible sonographically owing to surrounding aerated lung.

There is no indication for cardiac medications. Additional diagnostics may include lower airway sampling or consideration for screening lung FNA cytology. Respiratory support is recommended based on the clinical impression of the patient and radiographic findings. There are no cardiac anesthetic contraindications. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.

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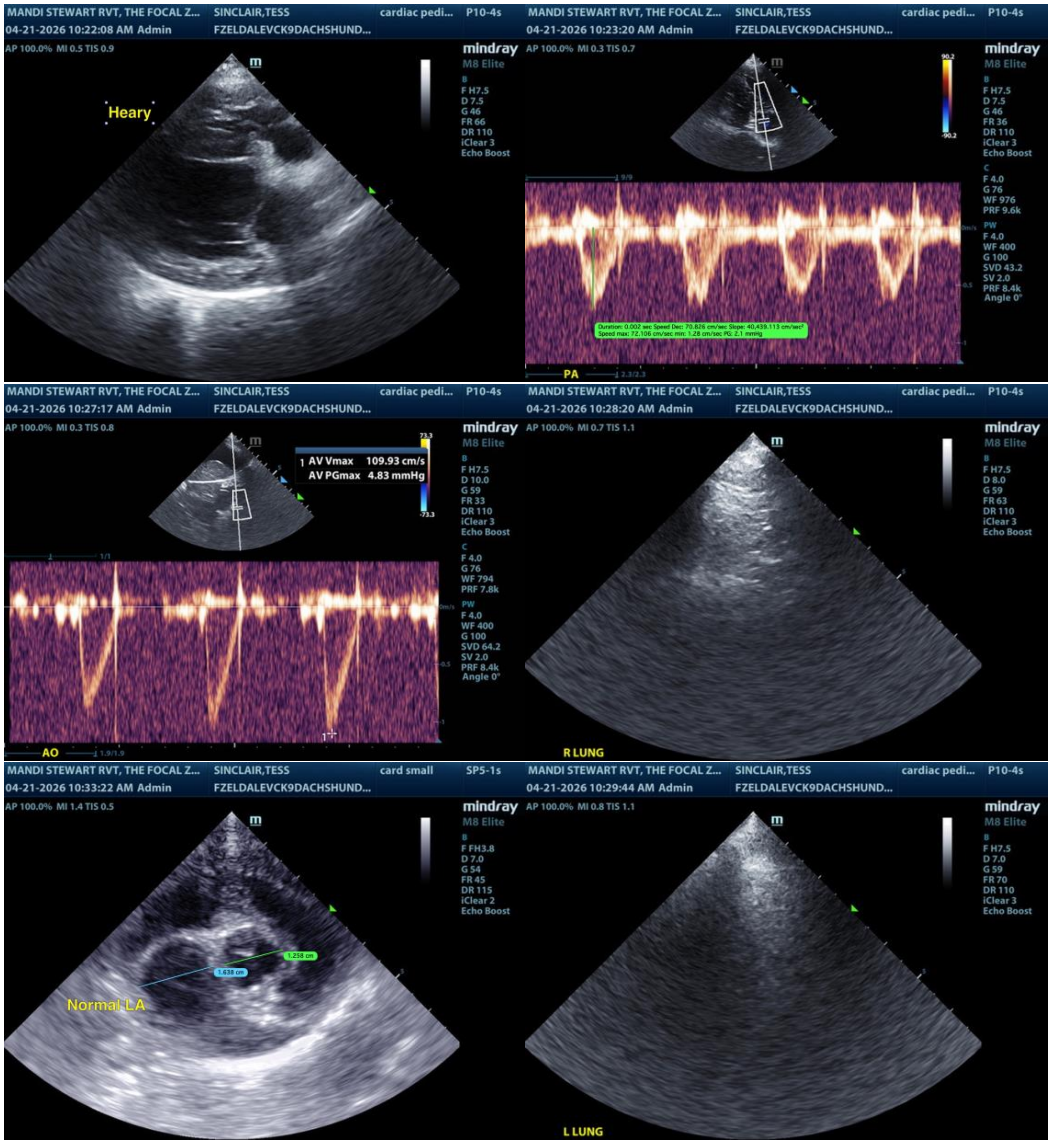

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
info@sonopath.com