PATIENT

Hudson Mackenzie

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

14 Years

WEIGHT

4.8 kg

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Headon Forest AH

REFERRING VET

Dr. Short

INVOICE

12446

DATE

11/24/25

PRESENTING CLINICAL SIGNS

Presented to clinic Nov 14 for increased resp rate with abdominal effort, progressively worsening over a 2 week period. POCUS revealed large volume of pleural effusion removed 50 ml white/pink triglyceride rich fluid and testing revealed Chylothorax. Hudson seemed much better at home, normal appetite and energy. Can still appreciate increased RR on PE but less abdominal effort. Removed additional 95 ml of fluid today prior to US. Has been on Gabapentin, Butorphanol injection today.

Abnormal PE/Chem/CBC/UA Results: Please see attached radiographs. CBC Chem and Lytes all WNL other than mild elevation in ALT Could not appreciate mass on rads due to the amount of fluid present.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	4.8	250	0.51	1.6	0.51	45	82
FELINE CARDIAC PARAMETERS	**LA/AO** (M-mode)	**LA/AO HEART BASE** (Sisson)	**LAD** LA MAX 4 Chamber		**LVOT VEL.** (m/s)	**RVOT VEL.** (m/s)	**IVRT** (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT	NM	1.5	1.45		--	1.3	NM
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							

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size and structure. Chamber volume and blood echogenicity were normal, no LA spontaneous contrast. The cranial and caudal **mitral** valve leaflets presented minor irregular age-related changes that are not clinically significant at this time with adequate extension in systole and union in diastole. No overt MR on doppler. The **left ventricle** presented normal free wall and septal thicknesses with mild alinear contour. The **myocardium** presented some echogenic remodeling consistent with age-related change or fibrosis. **Contractility** of the ventricular walls was adequate and in normal range for this patient's age. The **left ventricular outflow** tract demonstrated subjective normal laminar flow with unremarkable structure. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated expected findings for this age patient. The **right ventricle** was of normal size (1/3 diameter of LV), 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. Significant volume of pleural effusion was present. Irregular atelectic areas of pericardial lung with potential for air entrapment or pulmonary mineralization. No definitive pericardial or mediastinal masses in the visible window.

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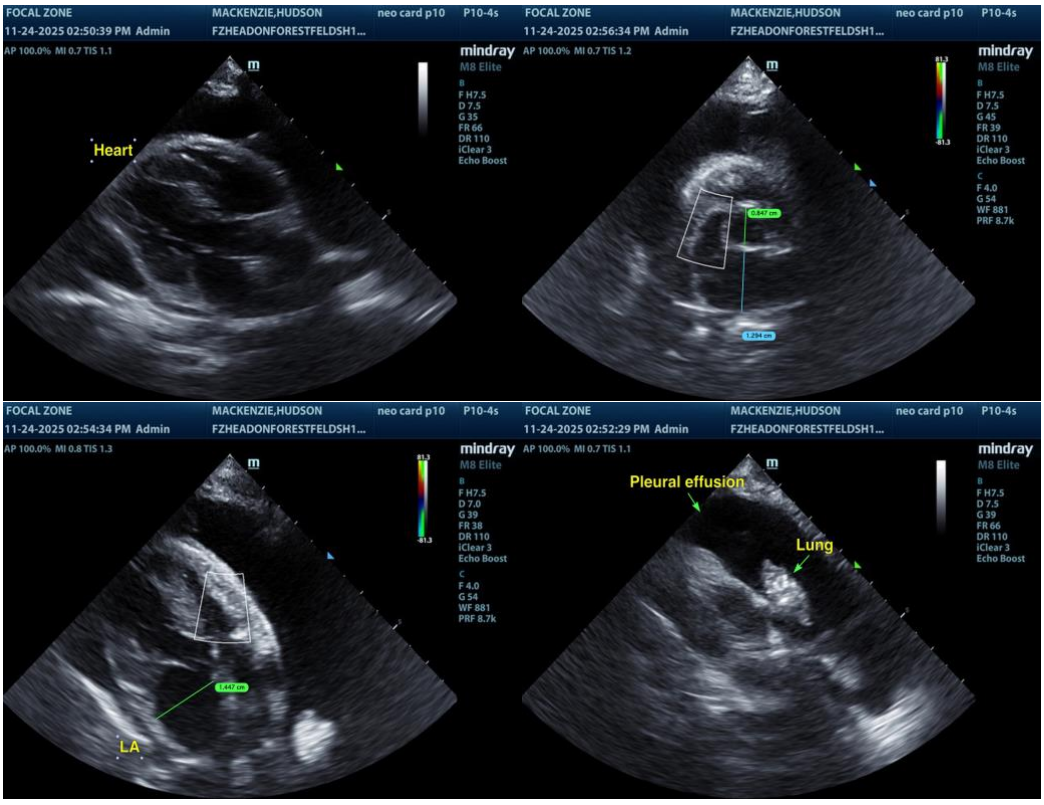
ULTRASONOGRAPHIC FINDINGS

- Normal cardiac structure/function with myocardial remodeling and suspect mild LV fibrosis.
- Significant volume of pleural effusion.
- Subjective pericardial atypical/atelectic lung.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The lack of significant cardiomyopathy including lack of LA enlargement, LV systolic dysfunction or overt arrhythmia indicate that the pleural effusion is most likely noncardiogenic in origin. Primary pulmonary disease i.e. infection, inflammation, consolidation, neoplasia, pleuritis or other, intrathoracic noncardiogenic pathology with FIP considered unlikely (given the patient's age) are all potentials. No obvious indication for cardiac medication. Correlation with therapeutic and potentially diagnostic thoracocentesis with effusion analysis cytology +/- culture/sensitivity if evidence of inflammatory component or FIP titers if clinically indicated in search of a more definitive diagnosis is recommended.



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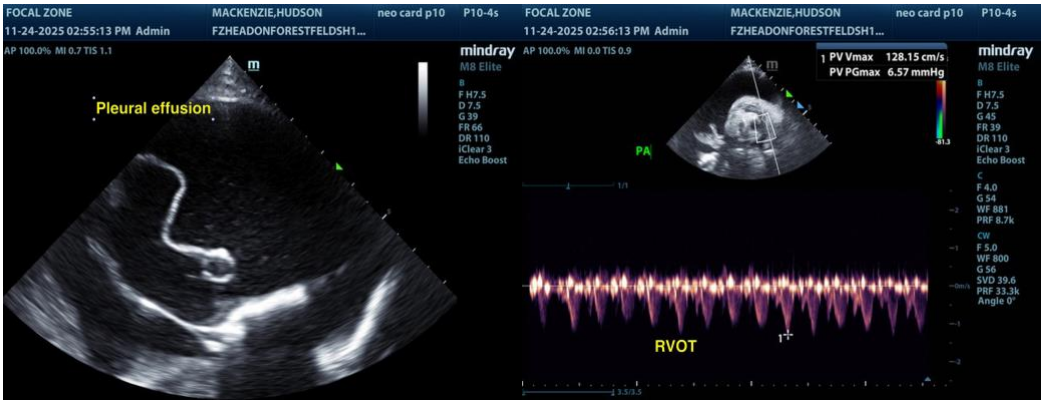

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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