

PATIENT PRESENTING CLINICAL SIGNS

PATIENT Jackson Carter
SPECIES Feline
BREED DLH
SEX Neutered Male
AGE 14 Years
WEIGHT 7.5 kg

-In for annual exam March 3/22: history of chronic arthritis. Noted by O has been sneezing last few weeks, non-productive, no congestion. Limping on front leg for a few days. Otherwise no other clinical symptoms. No major concerns noted upon exam. -Radiographs taken to assess joint disease in elbows/spine. Well defined mass in mediastinal area noted in spinal radiograph so thoracic radiographs taken. meds: Flexadin Advanced, Cartrophen injections, Gabapentin 100mg will be given prior to appt
 Abnormal PE/Chem/CBC/UA Results: HR 180bpm -Lateral spine multiple areas of spondylosis - Some osteophytes present around both elbows and posterior shoulder -Thorax radiographs: 1.5cm circular mass in the mediastinal area

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		176	0.65	1.52	0.6	57.6	90.3
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	1.33	1.25	1.2	1.0	0.69	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							

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reshny

HOSPITAL NAME

Main Street AH

REFERRING VET

Dr. Murphy

INVOICE

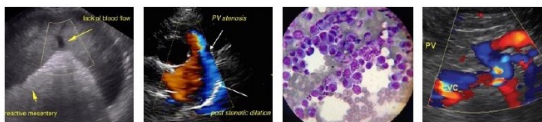
36162

DATE

3/14/22

Canine 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. No evidence of systolic anterior motion (SAM) of the mitral valve noted. The **left ventricle** presented mild increased IVS and borderline increased LV free wall thicknesses with maintained linear contour, and was not dilated or 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. 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** or free pleura fluid was noted or extra cardiac pathology in the visible planes. No overt extracardiac pathology in the visible planes. The cranial mediastinum and pericardial regions were free of overt or significant lesions in the visible window, yet thorough examination in the area of the cranial mediastinum was limited.



PATIENT ULTRASONOGRAPHIC FINDINGS

- Jackson Carter
- Borderline to mild IVS and LV free wall hypertrophy
 - Normal left atrium

SPECIES INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Feline Overtly normal cardiac structure and function without evidence of clinical issues such as systolic dysfunction, left or right heart chamber enlargement, or significant valvular insufficiency. Borderline to mild IVS and LV free wall hypertrophy, which may potentially suggest emerging HCM, which would be a rule out diagnosis assuming the patient is euthyroid and normotensive.

BREED

DLH

If not done, systemic blood pressure and assessment of T4 levels to rule out contributing factors is suggested. Overt evidence of pericardial or cranial mediastinal lesions, lymphadenopathy or masses were not definitively present. However, sonographic reassessment in the area of the cranial mediastinum is recommended for further assessment. No indication for cardiac medications, given the normal left atrial size, which indicates that the risk for future complication secondary to the possibility of emerging HCM is low. Sonographic monitoring of the heart with initial recheck echocardiogram suggested in 6 months.

SEX

Neutered Male

AGE

14 Years

ADDENDUM 3/17/22

WEIGHT

7.5 kg

Additional imaging of the pericardial region and cranial mediastinum were submitted for further review. Previously noted overtly normal cardiac structure and function. Possible yet ill-defined, focal, hypoechoic to uniform suspected lung or possible fat noted adjacent to the right heart base and right atrium, measuring approximately 2.0 cm in diameter. No other overt or significant pericardial or cranial mediastinal lesions (i.e., masses, lymphadenopathy or other) were visualized. No evidence of pericardial or pleural free fluid.

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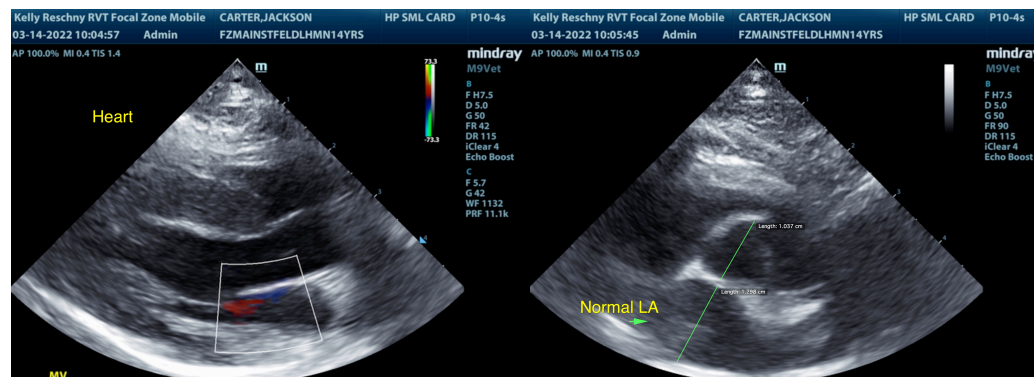
Although not definitive, possible small area of hypoechoic to uniform pericardial lung may suggest focal consolidation owing to non-cardiogenic fluid, non-specific inflammation/infection, granuloma, while the possibility of emerging neoplasia (although the uniform presentation of the possible lung was not overtly consistent with neoplastic criteria) cannot be excluded. Given that the patient is not exhibiting lower respiratory signs (i.e., coughing, dyspnea, etc.), continued radiographic or sonographic monitoring for evidence of progression would be reasonable. Alternatively, thoracic CT (if possible) could be considered for further assessment.

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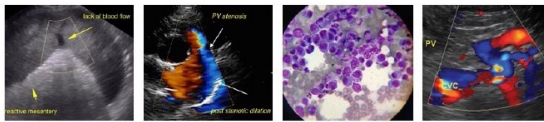
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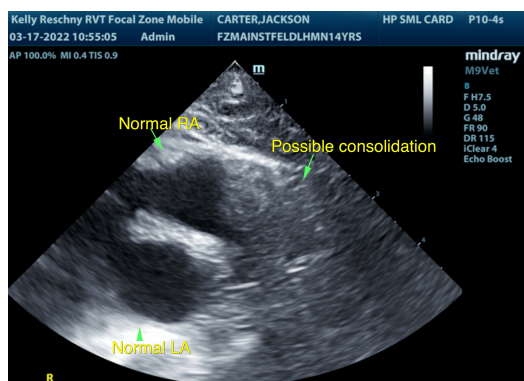
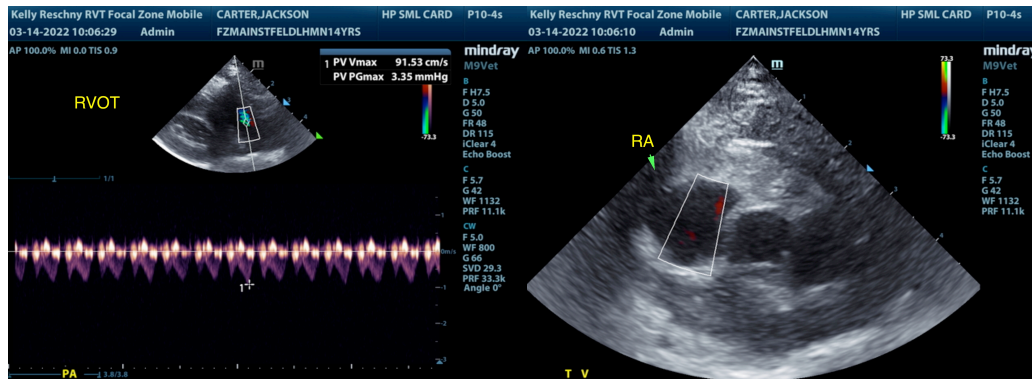
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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