

## PATIENT PRESENTING CLINICAL SIGNS

**PATIENT** Ripley Cayley Not e/d, still using litter box, always sleeping. hasn't been to a vet for several years. T 38.6 C HR 180 no murmur or arrhythm, strong femoral pulses RR 60, abdominal component, increased lung sounds dorsally MM pink/moist, CRT < 2sec EENT, LN WNL Abdomen soft nonpainful Skin and coat dull, greasy BS 3/5 QAR Increased effort and RR/lung sounds Suspect pleural effusion DIFF chf, neoplasia, infect, toxin, other ~100mLs of fluid drained

**SPECIES** Feline Abnormal PE/Chem/CBC/UA Results: Blood work WNL other than low lymph 0.17 (0.92-6.88), low eos, mild increased mch, rdw chem WNL other than mild decreased urea (likely due to not eating), ALT low T4 normal Blood work unremarkable other than possible lymphoma with low wbc. 2 view chest rads marked pleural effusion, unable to visualize heart on either view. Floating lung on lateral.

**BREED** DLH

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
<b>NORMAL PARAMETER</b>	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
<b>PATIENT</b>		163	0.52	1.65	0.46	54.5	89.3
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/)	
<b>NORMAL PARAMETER</b>	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
<b>PATIENT</b>	1.2	1.39	1.4	<2.0	0.8	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)

## Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size and structure. Chamber volume and blood echogenicity were normal. 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. The **left ventricle** presented normal free wall and septal thicknesses with linear contour. The **myocardium** presented some echogenic remodeling consistent with expected age-related change. **Contractility** of the ventricular walls was adequate and in normal range for this breed and patient size. The **left ventricular outflow** tract demonstrated normal laminar flow with subjectively 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 subjective normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No dilation due to heartworm disease, cuor pulmonale, overt stenosis, or overt clinical pulmonary hypertension was noted. Moderate free pleural fluid was noted without overt evidence of concurrent pericardial free fluid. Atypical to irregularly contoured lung tissue exhibiting mild non-homogeneous echogenicity was present adjacent to the heart. Distinct evidence of pericardial or cranial mediastinal masses was not present.

## IMAGING PERFORMED BY

Kelly Reschny

## HOSPITAL NAME

Chedoke AH

## REFERRING VET

Dr. Heinen

## INVOICE

24815

## DATE

8/19/21



## PATIENT

Ripley Cayley

## SPECIES

Feline

## BREED

DLH

## SEX

Neutered Male

## AGE

11 Years

## WEIGHT

6.8 kg

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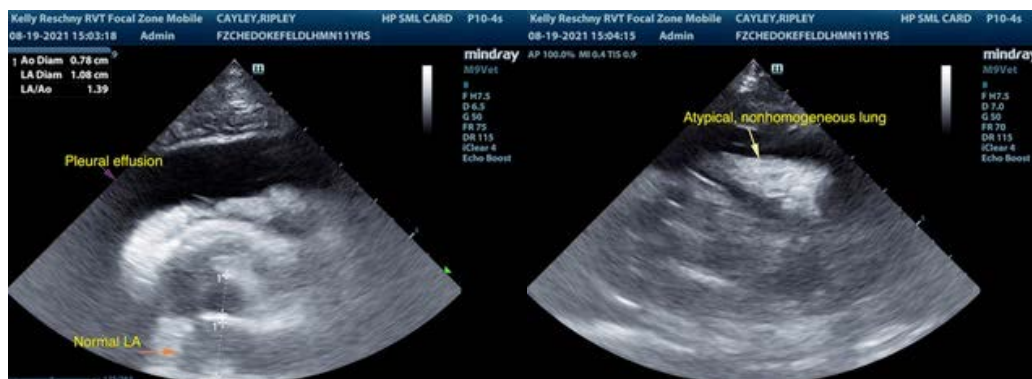
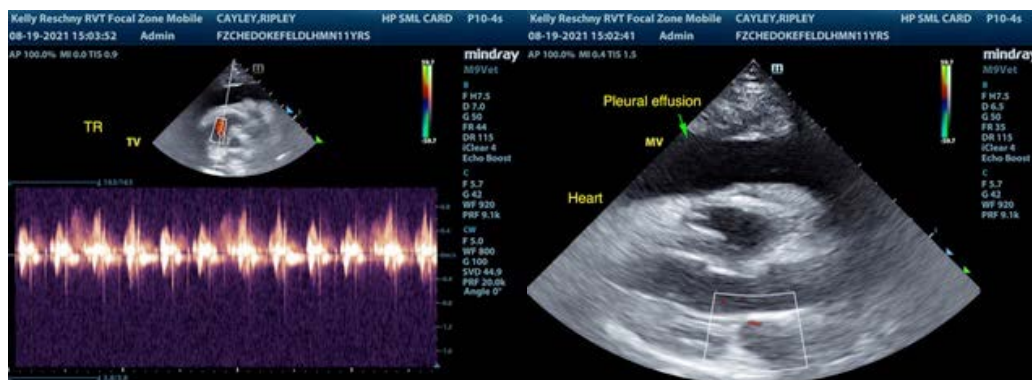
Chedoke AH

## ULTRASONOGRAPHIC FINDINGS

- Non-cardiogenic pleural effusion
- Subjective atypical to irregularly contoured to non-homogeneous pericardial lung tissue – neoplasia favored, atelectasis or consolidation possible.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Potential considerations for the non-cardiogenic effusion may include transudate, modified transudate, exudate, hemorrhagic or chylous effusion. Although not definitive, neoplasia is favored in this case and considered a primary differential diagnosis. FIP is technically a potential, yet considered less likely given the age of the patient. Further correlation may include effusion analysis, cytospin cytology +/- culture and sensitivity if evidence of inflammatory cells. Guarded prognosis pending effusion analysis. Periodic prophylactic thoracocentesis may be required. Likewise, thoracic CT may be indicated for additional assessment.



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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. 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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