



PATIENT

Oliver Gruenfelder

PRESENTING CLINICAL SIGNS

cardiac follow abd recheck liver and kidney

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

8 Years

WEIGHT

15 Pounds

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Maniar

INVOICE

35862

DATE

2/24/22

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

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	0.5	1.2	0.5	30	--
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	1.6	--	3.7	--	0.9	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 cardiac presentation presented largely normalized internal volume with adequate contractility. Slightly prominent left atrium. Right heart and pericardium were unremarkable. No evidence of pleural effusion or masses.

Urinary System

The urinary bladder, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The kidneys presented persistent interstitial nephrosis pattern. The right kidney measured 3.5 cm with cortical infarct in the caudal pole of the right kidney. The left kidney measured 3.45 cm. Power doppler assessment of the kidneys presented subnormal signals, indicative of chronicity.

Adrenal Glands

The regions of the adrenal glands were unremarkable.

Spleen

The spleen presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.



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Liver

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The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed minor hypertrophied muscularis. No lack of mural detail noted.

Pancreas

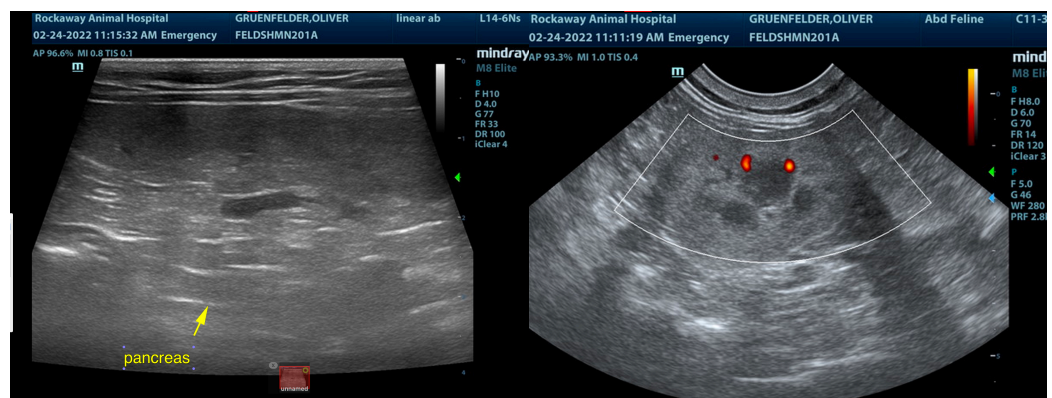
The **pancreas** appears largely resolved. No residual pancreatitis noted.

ULTRASONOGRAPHIC FINDINGS

- Resolving unclassified cardiomyopathy – possible history of myocarditis as cause of initial presentation
- Interstitial nephrosis – moderate to near end stage

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the global presentation in this patient, underlying infectious disease may be playing a role, causing myocarditis. The heart appears to be largely resolved with only mildly prominent left atrium. I'm most concerned long-term regarding the renal presentation, as the kidneys appear near end stage from a subjective standpoint.





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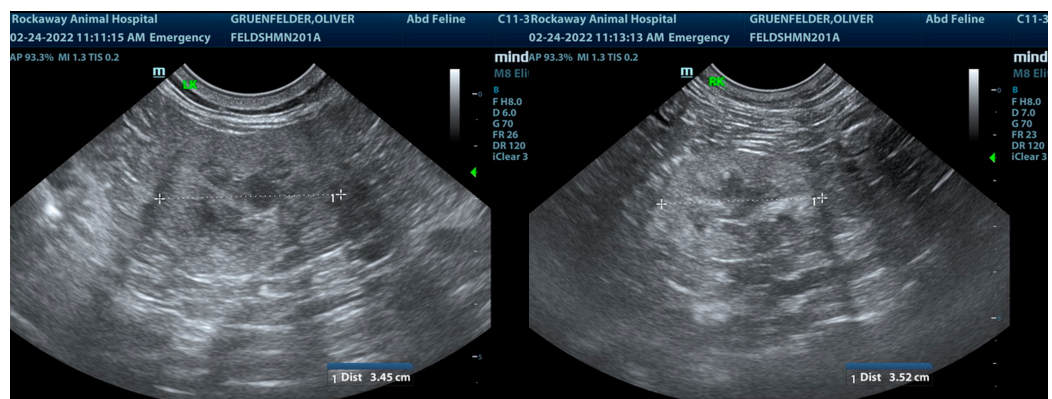
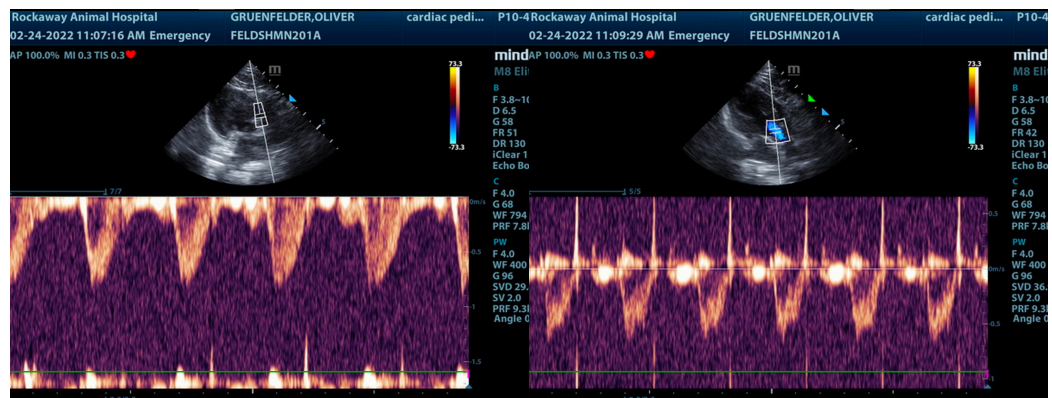
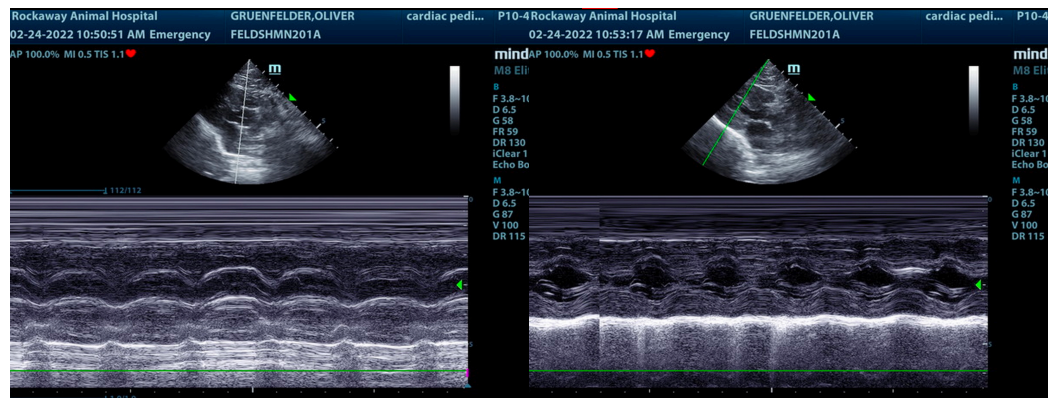
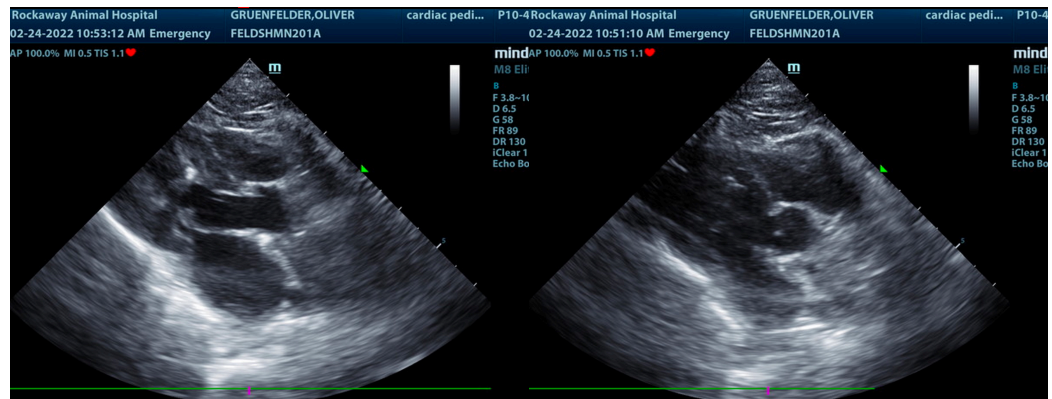
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

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