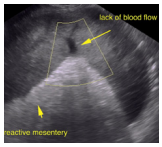
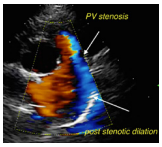
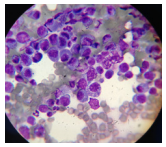
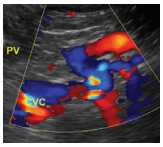
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Jen Ciak

SPECIES
Feline

BREED
DSH

SEX
Spayed Female

AGE
13 Years

WEIGHT
9.4 Pounds

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

IMAGING PERFORMED BY
Jenn

HOSPITAL NAME
Rockaway AH

REFERRING VET
Dr. Maniar

INVOICE
35642

DATE
2/14/22

PRESENTING CLINICAL SIGNS

weak femoral pulse suspect arterial thromboembolism abnormal probnp and hm

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	0.51	1.35	0.53	54.1	88.9
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	1.49	1.25	1.1		<2.0	<2.0	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

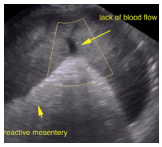
The echocardiogram in this patient demonstrated normal left atrial size and structure. Chamber volume and blood echogenicity were normal. No evidence of spontaneous contrast or thrombus. The cranial and caudal mitral valve leaflets presented minor irregular age-related changes that are not clinically significant at this time with adequate extension in systole and union in diastole. The left ventricle presented overtly normal free wall and septal thicknesses with mild alinear contour. The myocardium presented some echogenic remodeling consistent with expected age-related change, yet possibly indicative of mild myocardial fibrosis. 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 normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No dilation due to heartworm disease, cor pulmonale, stenosis, or pulmonic hypertension was noted. No visible pericardial or free pleural fluid was noted. The mediastinum was free of masses in the visible window.

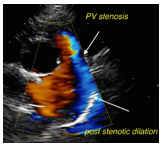
Urinary System

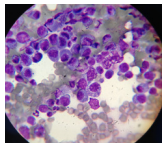
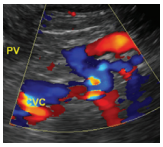
The urinary bladder was mildly distended with moderate non-dependent to swirling particulate sediment. No evidence of inflammatory or neoplastic urinary bladder criteria. The urethra was normal to a depth of 2.0 cm.

Sonographic assessment of the iliac trifurcation revealed subjective normal blood flow without overt evidence of saddle thrombus.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and





SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Jen Ciak

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

13 Years

WEIGHT

9.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Maniar

INVOICE

35642

DATE

2/14/22

loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The right kidney measured 4.1 cm.

The left kidney was normal in size and overall contour. The left kidney exhibited subjective cortical thinning with uniform increased cortex echogenicity and increased medullary volume with mildly enhanced left kidney corticomedullary border demarcation. Mild pyelectasia was present in the left kidney. The left kidney measured 3.6 cm.

Adrenal Glands

No overt pathology in the area of the left and right adrenal glands.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

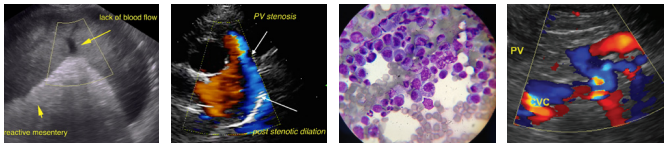
The pancreas was normal in size and contour with heterogeneous to mildly hypoechoic parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

No omental masses, lymphadenopathy or effusion.

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function with mild LV myocardial remodeling
- Moderate particulate to swirling urinary bladder sediment – cellular or crystalline debris with potential for mucus.
- Left kidney non-specific cortical thinning exhibiting enhanced cortex echogenicity, increased medullary volume, secondary well demarcated corticomedullary border, and mild pyelectasia.
- Right kidney mild chronic renal changes



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Jen Ciak

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

13 Years

WEIGHT

9.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Maniar

INVOICE

35642

DATE

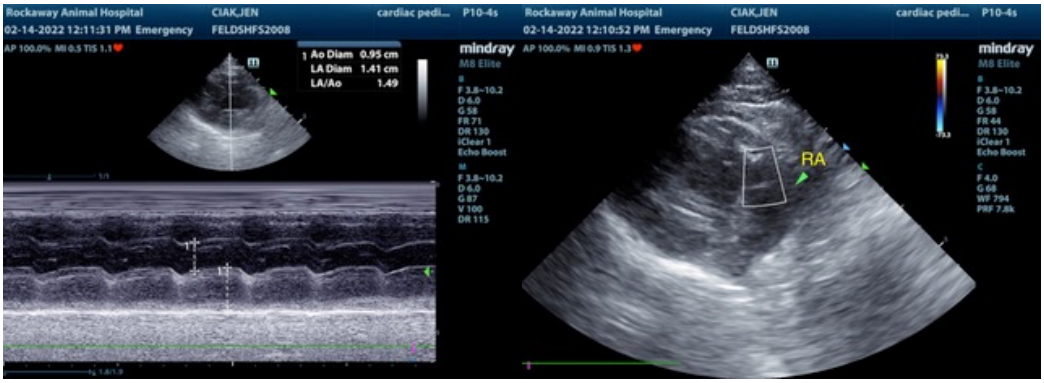
2/14/22

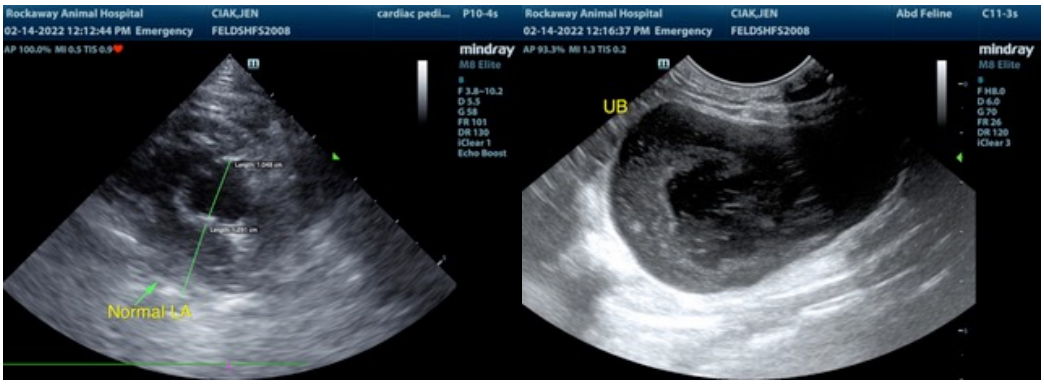
- Heterogeneous to mildly hypoechoic pancreas – non-specific, age related changes suspected, potential for low-grade inflammation.

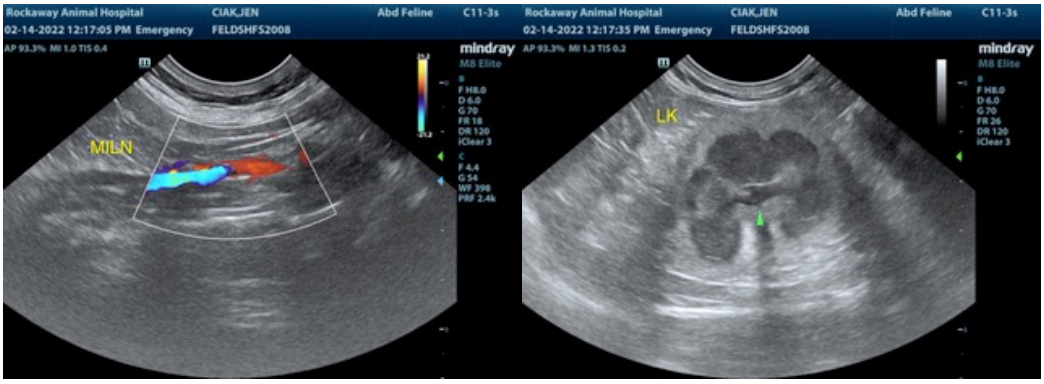
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Potential for emerging HCM, although no overt evidence of significant IVS or LV free wall hypertrophy was present. Assessment of T4 levels and systemic BP recommended to rule out potential complicating factors. The lack of the left atrial enlargement indicates that the risk for congestive heart failure and/or cardiac thrombus formation appears to be relatively low. Therefore, while the possibility of a transient thrombus cannot be definitively excluded, it appears unlikely based on this exam. No overt indication for cardiac medications.

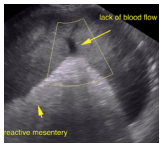
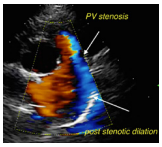
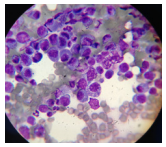
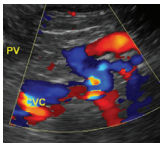
Potential for emerging left kidney nephropathy such as pyelonephritis. Potential for emerging left kidney neoplastic criteria considered a less likely differential diagnosis, yet cannot be definitively excluded. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Spec fPL could be considered for further assessment of the pancreas.







SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Jen Ciak

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

13 Years

WEIGHT

9.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

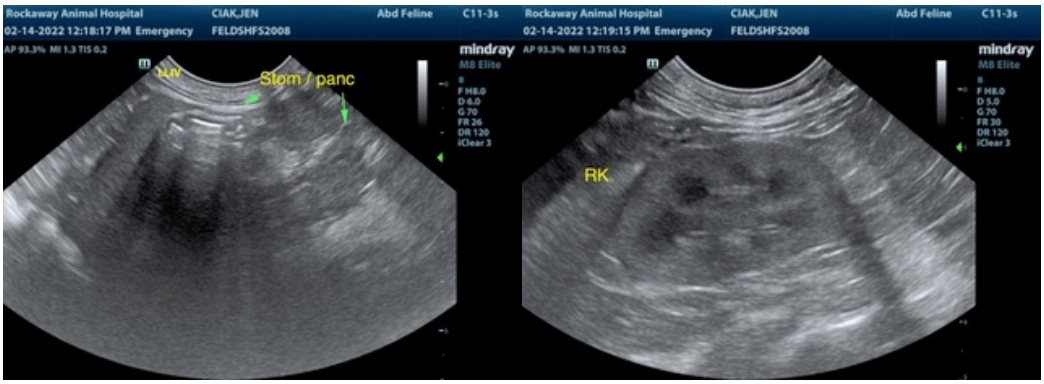
Dr. Maniar

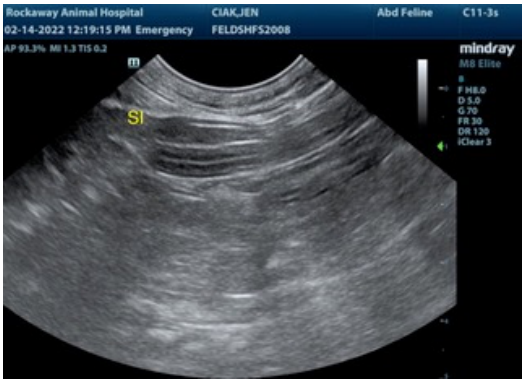
INVOICE

35642

DATE

2/14/22





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.

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