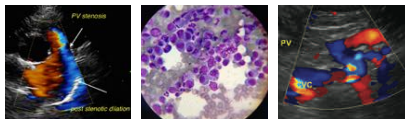
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE
10/12/21

PATIENT
Ginger Kolk

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Spayed Female

AGE
6/14/18

WEIGHT
12.5 lbs

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Martinoli

INVOICE
92344

PRESENTING CLINICAL SIGNS

History: **Presenting Complaint:** Vomiting; Appetite Decreased; Fleas.
Date: 10-10-2021 **Notes:** Thursday urinated outside of box; was dark brown in color. Thursday and Friday had some regurg. after owner fed her milk. Yesterday and today didn't want dry food but did eat some wet food; not as much as normal. Today vomited foamy material/bile. Has acted like she isn't comfortable recently; slightly anxious; but also, lethargic. Not drinking. **Assessment**: r/o urinary tract infection; nausea; gastroenteritis; hepatic lipidosis/other liver disorder; renal disease. **Plan:**
Start with Diagnostics testing - Blood work (Chem 10/PCV/TP) and UA; Maropitant to start. Next
Recommend to Owner Hospitalization, IV catheter, fluid therapy, appetite stimulant; monitor liver values
Owner Elects to Owner authorizes recommended treatment.
Current Medications: Unasyn, Gabapentin, Mirtazapine, Cerenia, Capstar.
Lab Results: Attached separately.
Radiographs: Xray Abdomen 2 View NSF. Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: not needed
Stat Report: not requested

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (4.25 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Mild pyelectasia was noted and measured 0.23 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.34 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is mild pyelectasia that measured 0.12 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively large in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder revealed

moderate debris. The gallbladder wall appears thick at 0.35 cm. The common bile duct appears mildly dilated with biliary sludge measuring 0.31 cm.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and hypoechoic as compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

A moderate amount of anechoic free fluid was noted. Mild, mesenteric lymphadenopathy was noted with mesenteric lymph nodes measuring 0.53 cm, 0.35 cm, 0.33 cm and 0.32 cm. The omentum is generally of increased echogenicity.

Heart

A brief view of the heart was submitted. No pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large, heterogenous liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

- Thickened gallbladder wall with sludge and mild bile duct dilation. The findings could be consistent with cholecystitis.

- Moderate pancreatitis. The pancreatic changes are most consistent with moderate pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.

- Thickened, muscularis layer to the small intestine. The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.

- Moderate free abdominal fluid.
- Mild mesenteric lymphadenopathy.

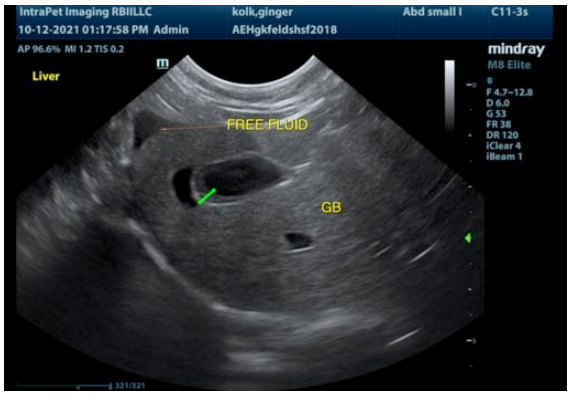
SECONDARY FINDINGS:

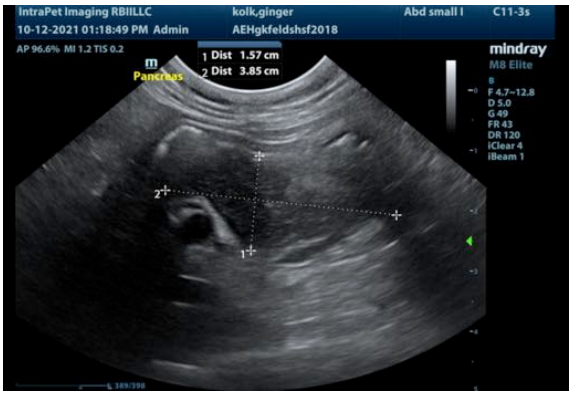
- Mild bilateral pyelectasia. Pyelectasia of the kidneys could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- Mild mesenteric lymphadenopathy. The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

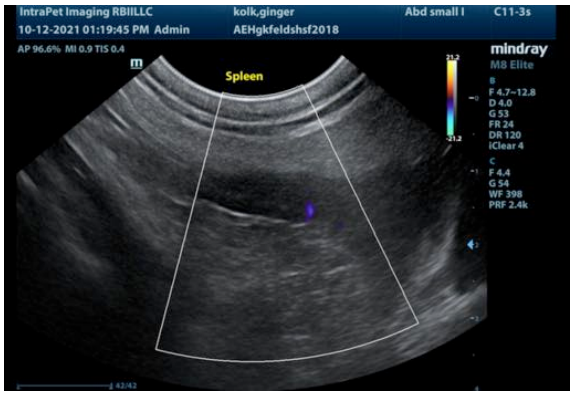
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

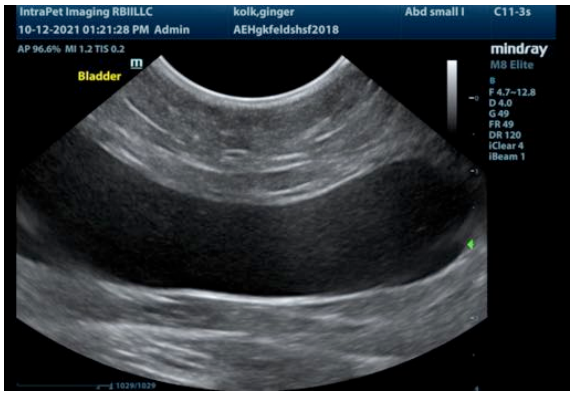
The liver is large and heterogenous along with evidence of acute pancreatitis and biliary changes. These findings are suggestive of triaditis, but neoplasia or infection can also be a concern. I recommend a GI panel with a quantitative fPLI, TLI, cobalamin and folate (Texas A&M University). To further evaluate the gallbladder and pancreas I recommend sampling of the free fluid to ensure that this is not a bile peritonitis (seems unlikely). I recommend a FNA of the liver (as long as coagulation parameters permit this) to help rule out possible round cell neoplasia, look for inflammation or lipidosis, etc.

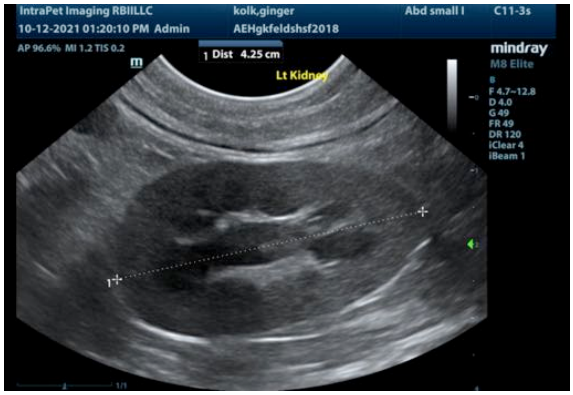
I recommend treatment for acute pancreatitis and hepatitis while diagnostics are pending. If the patient is not eating consider placement of a feeding tube. If symptoms persist exploratory surgery may be necessary to further evaluate the biliary tract biopsy the liver, bowel and pancreas.

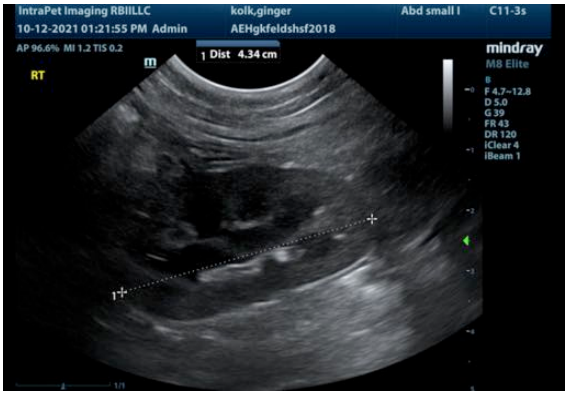


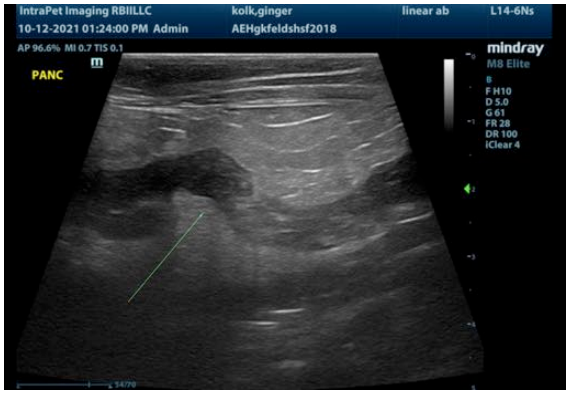


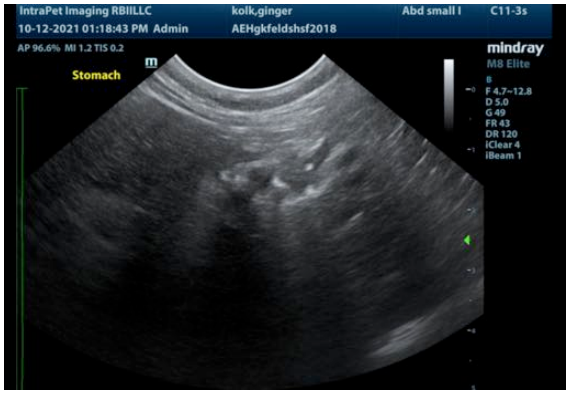


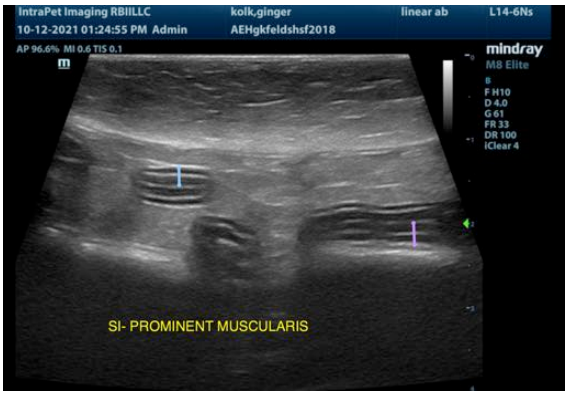












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com