IMAGING PERFORMED BY

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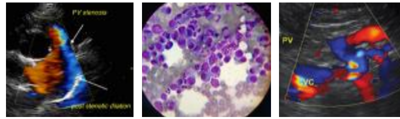

SonoPath

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DATE
6/2/22

PATIENT
Fozzy Bear Russell

SPECIES
Feline

BREED
4
Himalayan Cat

SEX
Neutered Male

AGE
8/19/200

WEIGHT
5.9 Pounds

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

HOSPITAL NAME
Eastern AH

REFERRING VET
Dr. Wu

INVOICE
15849

PRESENTING CLINICAL SIGNS

History: Chronic history of vomiting and diarrhea, improved with limited ingredient diet.

Current Medications: None listed. Gabapentin 50mg 2 hours prior to scan.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 (3.79 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.05 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.36 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.37 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with 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 (normal, large, small, normal/large, normal/small) in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. There are numerous small shadowing pinpoint foci within the hepatic parenchyma, most consistent with stones within the intrahepatic bile ducts. No focal nodules or cystic lesions are observed

The gall bladder is small and minimally distended. It is difficult to assess the wall of the gallbladder, as it is isoechoic to the hepatic parenchyma and full of echogenic debris. The cystic and common bile duct appears

somewhat tortuous and dilated, measuring at 0.34 cm. No obvious obstructions are noted and dilation is noted up to the point of the duodenal papilla, where there may be some mucoid debris.

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. The jejunum measured 0.25 mm in diameter. 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. The pancreatic duct is prominent, measuring 0.31 cm.

Free Abdomen

There is a small amount of free abdominal fluid visible. No significant lymphadenopathy is noted and the omentum is generally of increased echogenicity.

ULTRASONOGRAPHIC FINDINGS

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

- Decreased corticomedullary distinction in both kidneys. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

- Contracted gallbladder with debris and a dilated tortuous bile duct. Dilation of the common bile duct could be consistent with a functional obstruction (i.e., primary hepatic disease resulting in hepatocellular swelling) or with an extrahepatic bile duct obstruction (i.e., choledocholith, bile duct tumor, pancreatic disease, other).

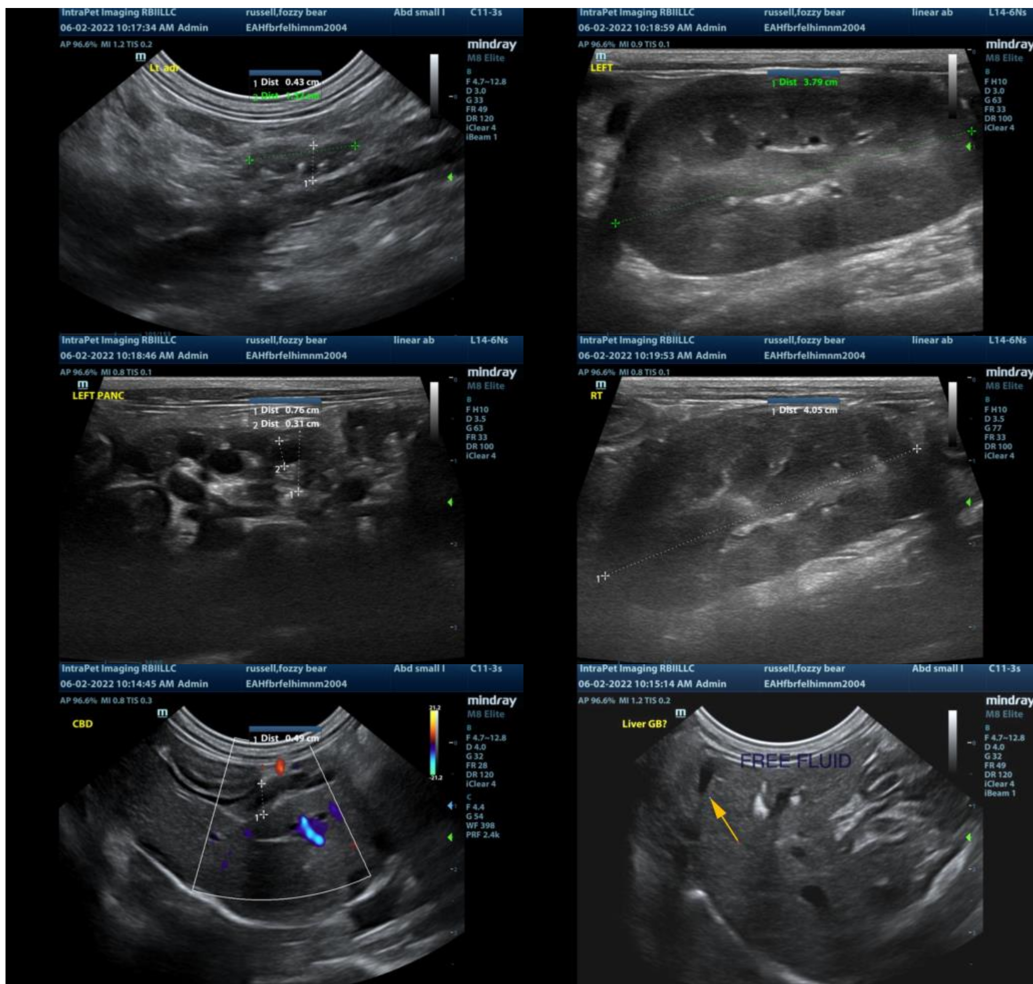
- Heterogenous liver with intrahepatic biliary stones. Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.

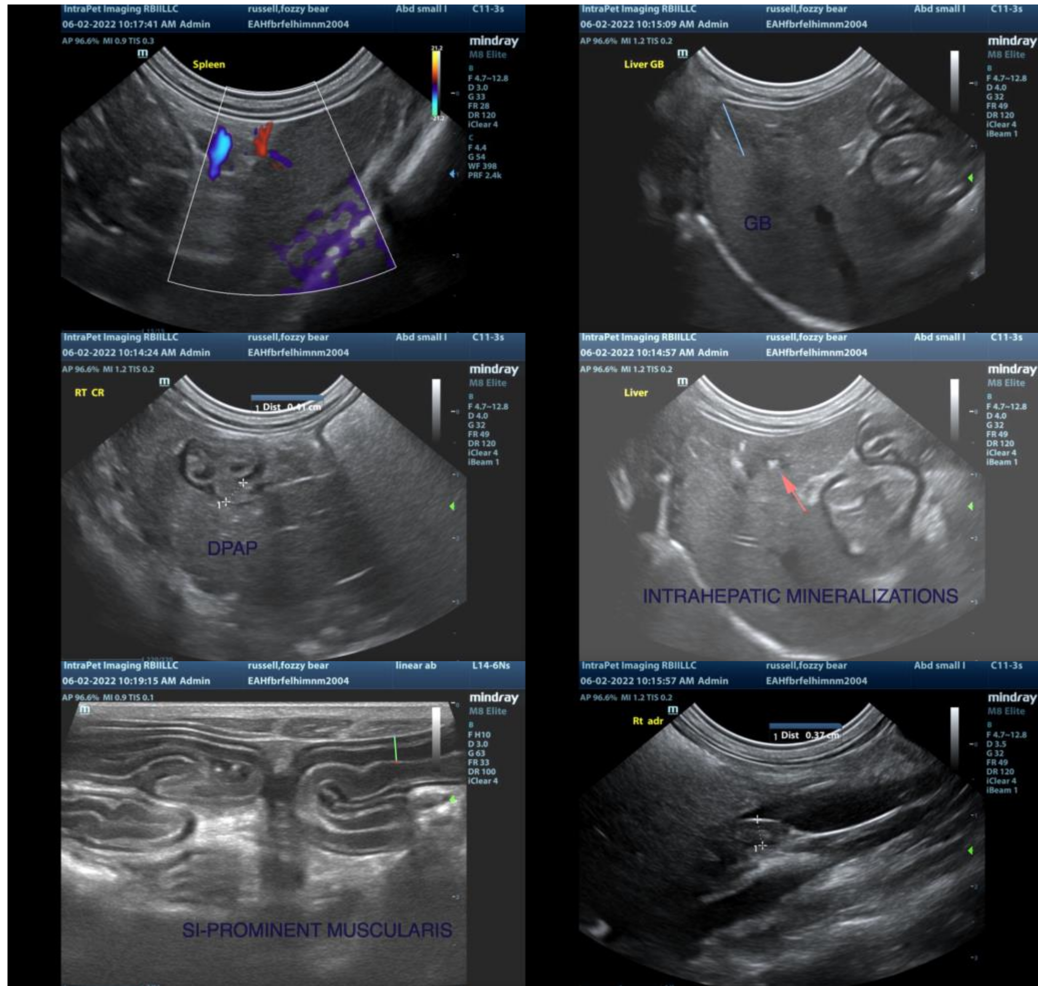
- Prominent hypoechoic pancreas with prominent pancreatic duct. The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The GI tract appears thickened with a prominent muscularis layer. Additionally, the liver is heterogeneous with intrahepatic bile stones. The bile duct is dilated, and the pancreas is prominent. The combination of hepatic biliary, pancreatic and gastrointestinal lesions makes me concerned for possible triaditis/cholecystitis, pancreatitis, etc.

- I recommend a novel protein/hydrolyzed protein prescription diet
- I recommend a GI panel (to Texas A & M) for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.
- Consider a fine needle aspirate of the liver (provided coagulation parameters are normal).
- Consider starting ursodiol therapy and antibiotics for cholecystitis, if there is no response to symptomatic treatment + antibiotics and ursodiol, then a low dose of steroids can be considered (fine needle aspirate of the liver should be performed prior to starting steroids).
- Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





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)
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