IMAGING PERFORMED BY

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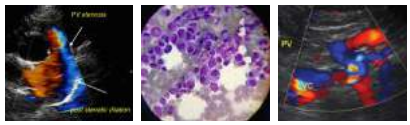

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DATE

8/12/21

PATIENT

Mr. Kitty Paisley

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Male Neutered

AGE

2011

WEIGHT

9.9 lbs.

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Eastern Animal Hospital

REFERRING VET

Dr. Bottaro

INVOICE

11632kk

PRESENTING CLINICAL SIGNS

History: Weight loss, elevated proBNP, high ALT (456) and AST (171).

Current Medications: Convenia given 7/26/21.

Lab Results: high ALT (456) and AST (171). See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not needed.

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (3.94 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. A few nephroliths are visualized. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.69 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. A few nephroliths are visualized. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.39 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is mildly enlarged (0.62 cm width) with a normal shape, glandular echogenicity, and detail. Surrounding vasculature is normal.

Spleen

The spleen is subjectively prominent in size (1.07 cm in width at the level of the hilus) with a slightly undulating medial contour. The parenchyma is subtly mottled in appearance. No distinct focal lesions are observed. Splenic vasculature appears normal with no evidence of thrombosis.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Intrahepatic biliary stones are observed throughout the organ. Hepatic vasculature is of normal volume with no evidence of congestion. The gall bladder is moderately distended. The wall is mineralized and slightly irregular. A 1.09 cm choledocolith is observed in the proximal cystic duct. At least one additional choledocolith is observed within the cystic/common bile duct. The cystic and common bile ducts are dilated (up to 0.45 cm). Surrounding mesentery is hyperechoic.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis to mucosal ratio and mild thickening of the submucosal layer in most segments. In one segment of small intestine, a 0.85 cm echogenic area is observed within the lumen and there is focal luminal dilation. The ileocolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

Pancreas

The left limb of the pancreas is visible/prominent with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is borderline dilated (0.25 cm in diameter). The mesentery effacing the serosal surface is mildly hyperechoic.

Free Abdomen

The mesentery in the cranial abdomen is hyperechoic. Trace free fluid is observed. Several prominent, hypoechoic to slightly heterogeneous and irregular in shape, mesenteric lymph nodes are visualized (the largest measuring 1.22 cm in length). Surrounding mesentery is hyperechoic. In addition, several nodes are visible in the right cranial quadrant.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The gallbladder wall mineralization is most consistent with cholecystitis. However, “porcelain” gall bladders have been associated with biliary adenocarcinoma. Choledocoliths with partial bile duct obstruction.
- Intrahepatic biliary stones – incidental.
- The pancreatic changes are suggestive of chronic, active pancreatitis.
- The intraluminal small intestinal dilation/lesion could be consistent with a polyp, tumor, or less likely, foreign material. The diffuse bowel pattern is consistent with inflammatory bowel disease with potential for emerging lymphoma.
- The lymphadenopathy may be secondary to reactive lymphadenitis, lymphoid hyperplasia, or infiltrative neoplasia.
- The cranial peritonitis is likely secondary to biliary and/or pancreatic pathology.

Secondary Findings:

- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- The mild right adrenomegaly may be a normal variant for this patient or may be secondary to hyperplasia or stress.

- Bilateral, age-related renal changes with non-obstructive nephroliths.

**Given the sonographic changes, “triaditis” is a consideration in this patient.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. A fine needle aspirate of the liver can be considered to assess for cholangiohepatitis (if clotting status is appropriate). A 25-guage needle should be used.

2. If a conservative approach is desired, consider empirical treatment for bacterial cholecystitis/cholangiohepatitis (amoxicillin-clavulanic acid +/- Metronidazole, Denamarin Advanced). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.

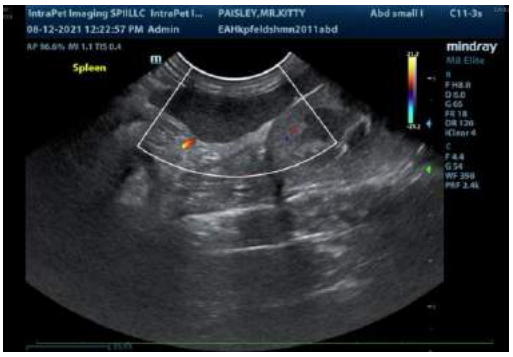
3. Other diagnostic considerations include the following:

    a. A malabsorption panel including serum cobalamin, folate, PLI and TLI.

    b. A 6-week limited antigen diet trial to assess for food allergies

    c. Fine needle aspirate of a mesenteric lymph node, if accessible.

4. If an aggressive approach is desired, an abdominal exploratory with biopsies of the liver, bowel, lymph node +/- pancreas can be considered. The small intestinal intraluminal lesion can also be evaluated at the time of surgery. Three-view thoracic radiographs should be performed prior to any anesthetic event. If surgery is not pursued, a repeat ultrasound is recommended in 2-3 weeks to reassess the intraluminal bowel lesion and other pathology.




IntraPet Imaging SPIILLC IntraPet I... PAISLEY,MR,K/TTY Abd small i C11-3s
08-12-2021 12:23:23 PM Admin EAHkpfeldshmn2011abd
mindray
LT Pancreas
Dist 0.79 cm


IntraPet Imaging SPIILLC IntraPet I... PAISLEY,MR,K/TTY Abd small i C11-3s
08-12-2021 12:24:31 PM Admin EAHkpfeldshmn2011abd
mindray
LT Adrenal
Dist 0.39 cm


IntraPet Imaging SPIILLC IntraPet I... PAISLEY,MR,K/TTY Abd small i C11-3s
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SI


IntraPet Imaging SPIILLC IntraPet I... PAISLEY,MR,K/TTY Abd small i C11-3s
08-12-2021 12:27:38 PM Admin EAHkpfeldshmn2011abd
mindray
RT
Choledochocith
Dist 1.09 cm


IntraPet Imaging SPIILLC IntraPet I... PAISLEY,MR,K/TTY Abd small i C11-3s
08-12-2021 12:28:41 PM Admin EAHkpfeldshmn2011abd
mindray
LN


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mindray
LN


IntraPet Imaging SPIILLC IntraPet I... PAISLEY,MR,K/TTY linear ab L14-6Ns
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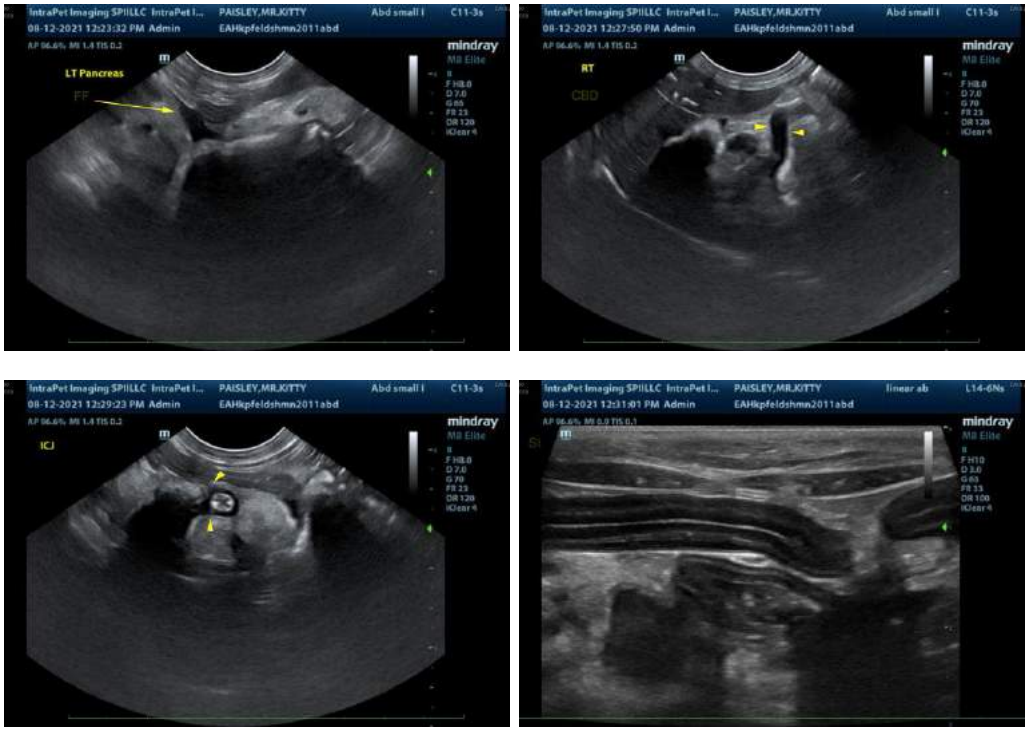
mindray
LIVER


IntraPet Imaging SPIILLC IntraPet I... PAISLEY,MR,K/TTY Abd small i C11-3s
08-12-2021 12:22:29 PM Admin EAHkpfeldshmn2011abd
mindray
LT
Stomach



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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
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