

**DATE PRESENTING CLINICAL SIGNS**

11/5/21 History: Chronic pancreatitis - not eating 4-5 days, vomiting.

PATIENT

Kit Kat Bogarty

Current Medications: Cerenia, Famotidine, Ampicillin, Metoclopramide, Simbadol

Lab Results: High liver enzymes ALT 921, ALKP 162, tbili 3.1 - anemia, hypoK+, gas distended stomach and SI. FPL pending

Date of Previous IntraPet Ultrasound: 04/28/2021

SPECIES

Feline

Sedation: Declined, not required for scan.

Stat Report: Not requested.

BREED

DSH

SEX

Spayed Female

AGE

2007

WEIGHT

9 lbs

INTERPRETED BYAndrea Nicastro, DMV,
Diplomate DACVIM
(Small Animal
Internal Medicine)**HOSPITAL NAME**

Hickory VH

REFERRING VET

Dr. Snyder

INVOICE

14191

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 anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2.0 cm, are normal.

The left kidney is normal size (3.39 cm in length); with a normal shape, smooth peripheral margins and normal internal architecture. There is poor corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present. There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (3.77 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with poor corticomedullary distinction. A few cortical infarcts are visualized. Hyperechoic shadowing diverticular foci are seen. Trace pyelectasia is present. There is no evidence of hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.44 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.53 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is subjectively prominent in size (0.88 cm in width at the level of the hilus) with slightly swollen peripheral contours. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely mottled in appearance. Ill-defined cystic nodules/areas are observed deep on the right side adjacent to the diaphragm. In addition, a 1.13 cm x 0.96 cm hypoechoic nodule is observed on the left. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is mildly distended. The wall is normal in thickness. A small amount of echogenic debris is observed within the lumen. The cystic and common bile ducts are severely dilated (up to 0.84 cm in diameter). The walls are diffusely thickened. The common bile duct can be followed to the level of the duodenal papilla, which is thickened at 0.75 cm in width. There is no obvious evidence of an intraluminal obstruction.

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 lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in some segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

Pancreas

The pancreas is severely and diffusely enlarged with irregular peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat and mottled as well as heterogeneous in appearance. A 0.60 cm focus of mineralization is observed within the pancreas near the duodenal papilla. The pancreatic duct is dilated (0.29 cm in diameter). Surrounding mesentery is hyperechoic.

Free Abdomen

There is no obvious evidence of free fluid. A few prominent lymph nodes are observed in the cranial and mid abdominal cavity, the largest measuring 1.52 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The pancreatic changes could be consistent with severe chronic active pancreatitis or possibly, pancreatic neoplasia (i.e., adenocarcinoma). The pancreatic tissue may be causing a partial common bile duct obstruction.
- Cholangitis is also suspected. The hepatic parenchymal changes are non-specific and could be secondary to inflammatory/immune mediated disease with concurrent cystic adenomas or cystic adenocarcinomas. Infiltrative neoplasia (i.e., lymphoma) is also possible.

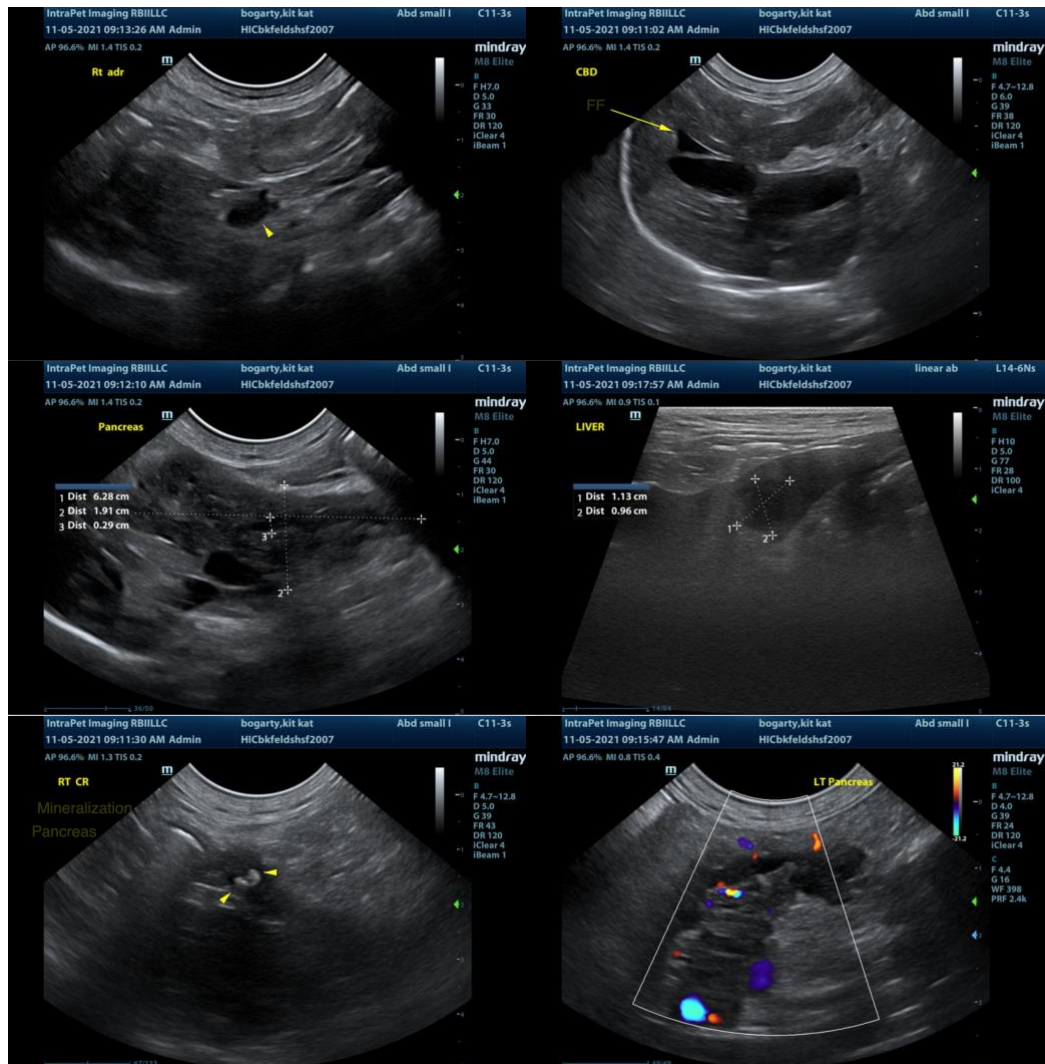
Secondary Findings

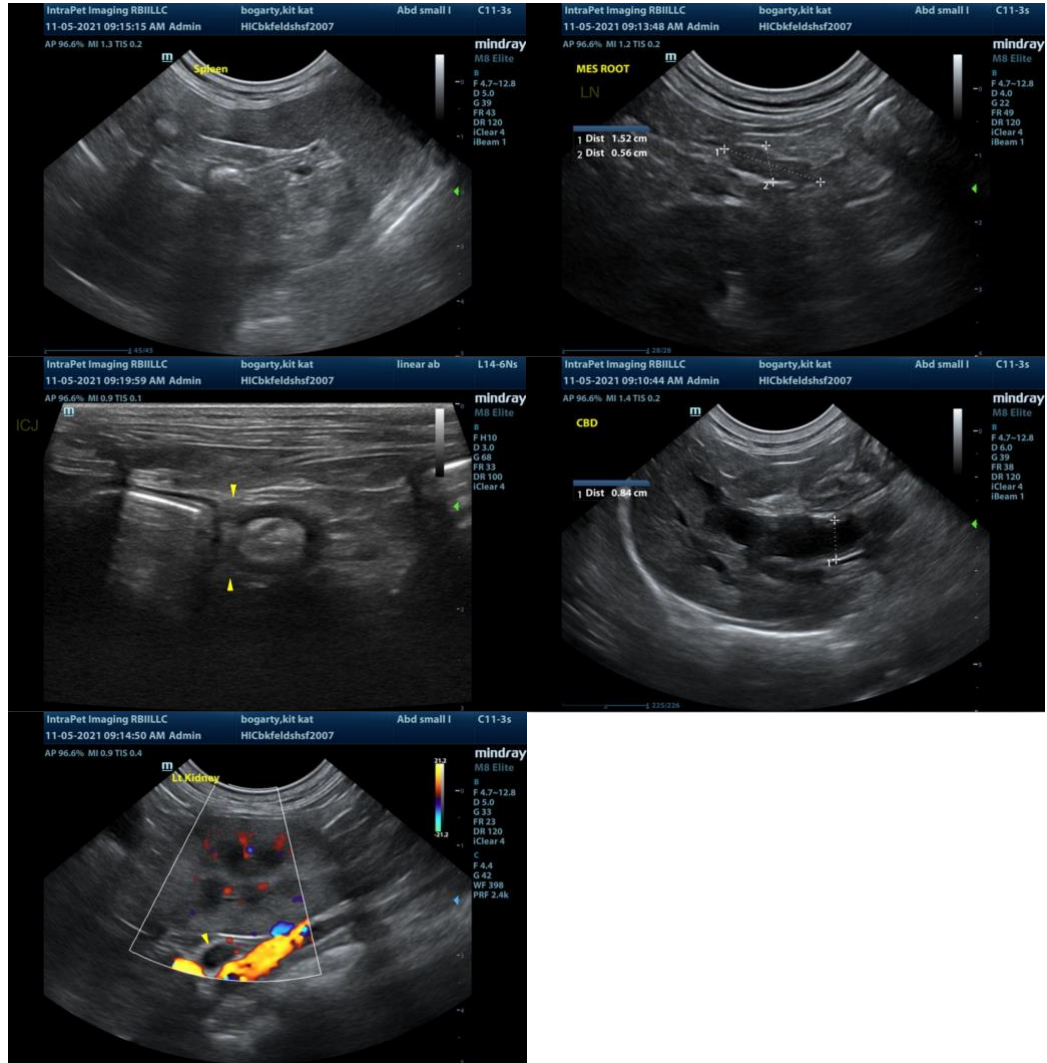
- Bilateral age-related renal pathology with right cortical infarcts
- The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- If an aggressive approach is desired, consider three-view thoracic radiographs to assess cardiopulmonary status as well as fine needle aspirates of the liver and pancreas (if clotting status is appropriate). A 25-gauge needle should be used. If cytologic evaluations are inconclusive, surgical biopsies of the liver, pancreas, GI tract and abdominal lymph nodes can be considered.
- A GI panel, including serum cobalamin, folate, TLI and PLI is also recommended. While awaiting test results, supportive care for pancreatitis/cholangitis/cholangiohepatitis is recommended, along with nutritional support (i.e., via temporary feeding tube) to help prevent/treat hepatic lipidosis.
- Given the pancreatic changes, also consider fresh frozen plasma administration.





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.

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