

**DATE PRESENTING CLINICAL SIGNS**

9/27/22

Presented for a routine dental and ALT was elevated on pre op BW. Pet has also dropped almost a pound since the spring and O states his appetite is down somewhat. Dental was delayed, x-rays taken and potential mass effect in the cranial abdomen.

PATIENT

Rudy Krauer

Current Medications: Fluoxetine 3mg SID.
Lab Results: ALT 366.

SPECIES

Feline

Radiographs: Questionable mass effect in the cranial abdomen.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

BREED

DLH

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Neutered Male

Urinary System

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

AGE

3/28/15

The left kidney has a normal shape and size (3.74 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

6.75 Pounds

The right kidney has a normal shape and size (3.67 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.33 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.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

The right adrenal gland is normal in size measuring 0.40 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.

HOSPITAL NAME

Greenbrier Vet Clinic

Spleen

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, 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.

REFERRING VET

Dr. Boccanfuso

Liver

The liver is subjectively normal in size, and hypoechoic 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.

INVOICE

41672

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The bile duct appears somewhat prominent measuring 0.31 cm at the duodenal papilla.

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. Jejunum wall measures 0.22 cm. 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 large and hypoechoic to surrounding mesentery, particularly in the left limb. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with moderate pancreatitis.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. No significant lymphadenopathy is noted. The omentum is hyperechoic around the left limb of the pancreas.

ULTRASONOGRAPHIC FINDINGS

- Hypoechoic, prominent left limb of the pancreas with surrounding hyperechoic mesentery – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation.
- Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Mildly mottled spleen – 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.
- Hypoechoic, heterogeneous liver – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.
- Subjectively thickened small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

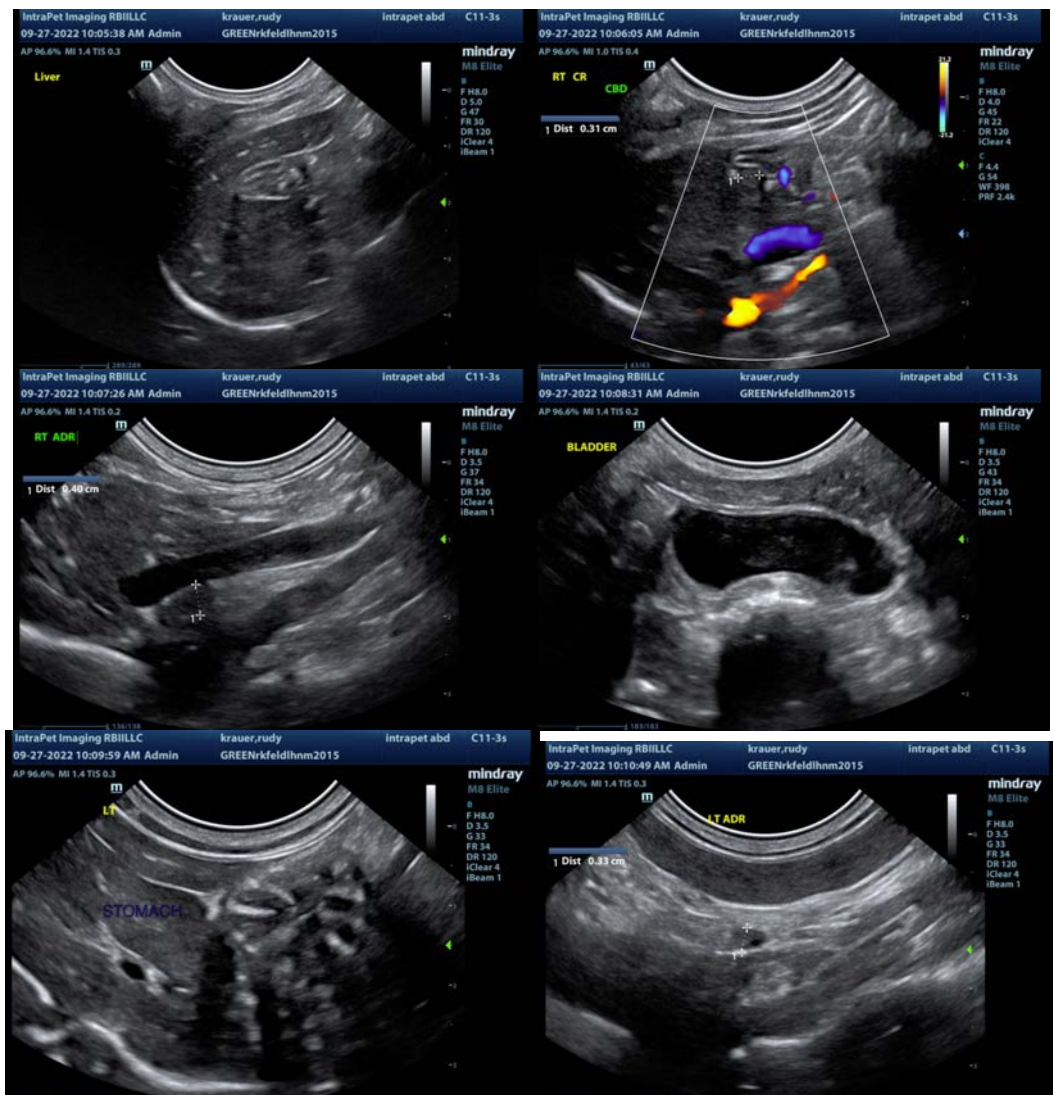
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

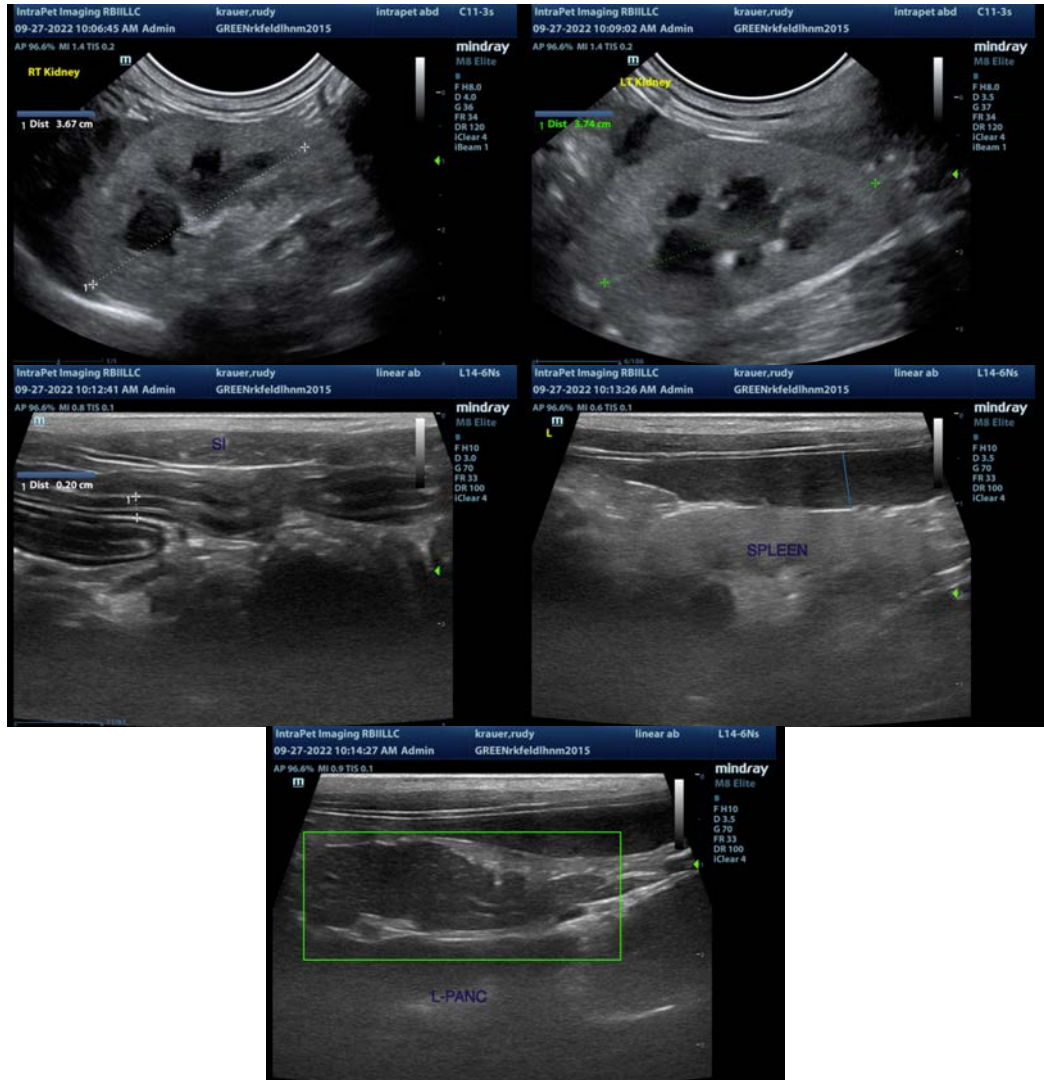
The left limb of the pancreas is prominent, irregular, and hypoechoic. There is hyperechoic mesentery surrounding. These findings are most consistent with moderate pancreatitis. Recommend medical treatment for pancreatitis with pain management, a low-fat diet, nausea medications, etc.

Additionally, the liver appears somewhat hypoechoic and heterogeneous. This is a non-specific finding that can be seen with infiltration, inflammation, infection, etc. Consider a liver function test and a fine needle aspirate of the liver if coagulation parameters are normal. Also consider a fine needle aspirate of the spleen, as it appears somewhat mottled. Additionally, consider thyroid testing if this has not already been done.

The small bowel measures as normal but subjectively appears somewhat prominent. The significance of this is unclear, but there is the possibility for a Triaditis type syndrome with changes observed in the liver, pancreas, and small intestine. Additionally, this could represent a reactive hepatopathy secondary to the pancreatic inflammation present. If the pancreatitis is not responding to medical therapy, consider a fine needle aspirate.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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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