

**DATE PRESENTING CLINICAL SIGNS**

11/2/22

Pixel presented on 10/26 for lethargy, vomiting, diarrhea, and decreased appetite of 2 days duration. Radiographs were unremarkable. Bloodwork showed minor glucose elevation and minor

PATIENT

Pixel Walton

hypochloremia/hyponatremia, along with a more significant lymphopenia. He was treated with cerenia and metronidazole. His vomiting has ceased and the stool is improved but not normal. His appetite remains poor; he did not eat from 10/26-10/29 and ate only small amounts at a time from 10/29-10/31 and still seems to be lethargic per his owner. We are starting appetite stimulants.

SPECIES

Feline

Current Medications: Elura 20 mg/ml 0.5 mL PO q 24 hr starting 10/31
metronidazole 250 mg/ml 0.2 mL PO q 12 hr starting 10/26

BREED

DSH

Lab Results: lymphopenia, hyperglycemia (mild, suspect stress), hyponatremia, hypochloremia.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

AGE

7/20/11

WEIGHT

11 Pounds

The right kidney is normal in size (4.12 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

INTERPRETED BYBeth Johnson, DVM
DACVIM

The left kidney is normal in size (4.29 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

IMAGING PERFORMED BY

Rachel Brillhart RDMS

Adrenal Glands

The right adrenal gland is normal in size (0.41 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

HOSPITAL NAME

Frederick Road VH

The left adrenal gland is normal in size (0.50 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Flynn

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

INVOICE

42500

Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

Pancreas is prominent in size with swollen irregular contour. Parenchyma is heterogenous characterized by hyperechoic tissue remodeling intermixed with ill-defined hypoechoic nodules. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

PRIMARY FINDINGS

- **Pancreatic nodular hyperplasia** – Infiltrative neoplasia cannot be ruled out but is considered less likely. Low-grade smoldering chronic pancreatitis cannot be ruled out.
- **Reactive mesenteric lymph nodes** – infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- **Hyperechoic hepatomegaly** – This appearance is most consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or round cell neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.

ULTRASONOGRAPHIC FINDINGS

- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

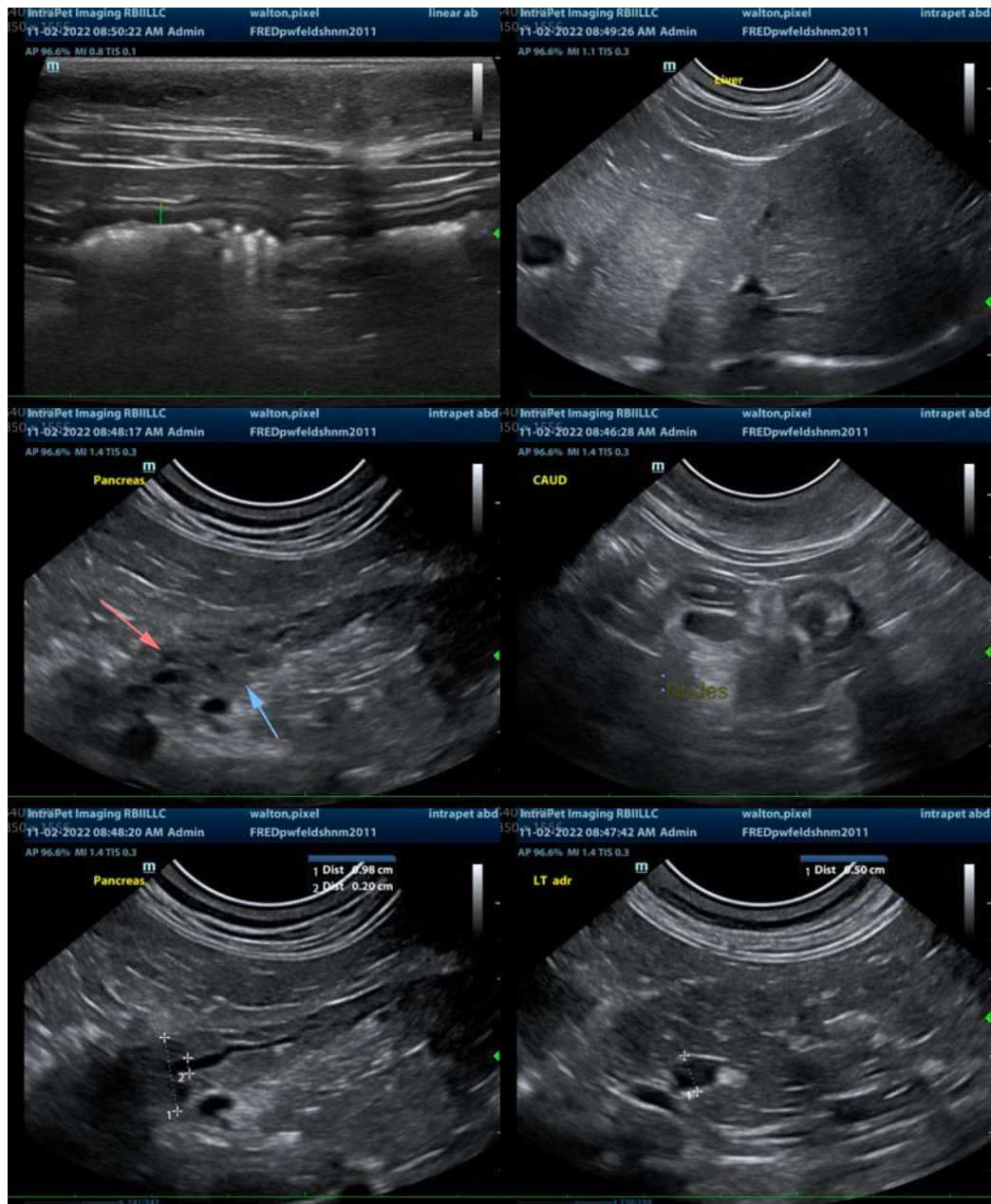
There is no ultrasonographically visible evidence of infiltrative bowel disease in these images at this time. However, that does not rule out inflammatory bowel disease. Given the concurrent pancreatic changes combined with the history, A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

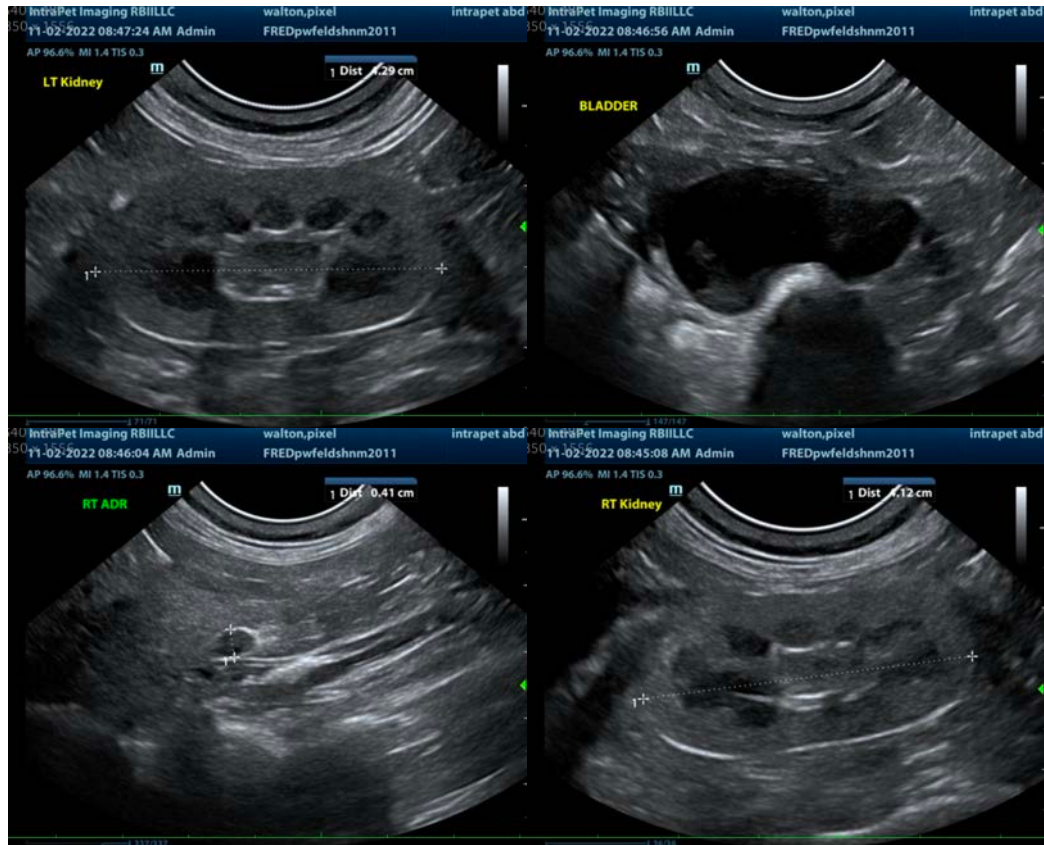
The suspicion is that this patient's appetite decreased during a potential flare up of pancreatitis or gastroenteritis, leading potentially to hepatic lipidosis, given the appearance of the liver. Therefore, in addition to the appetite stimulant and/or even a feeding tube if appetite stimulant doesn't work, other

empirical therapies include antiemetics and gastroprotectants as well as empirical deworming with a 5-day course of Panacur, a probiotic such as Provable or Visbiome, and, if tolerated once patient is eating, a transition to a hydrolyzed protein diet could be considered.

If clinical signs don't improve, and/or laboratory changes warrant further evaluation, a fine needle aspirate of the liver and/or the pancreas could be considered if the patient's coagulation status is appropriate.

Additionally, if not already evaluated, Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.





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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