

**DATE PRESENTING CLINICAL SIGNS**

11/9/22 Diarrhea & inappetance x 1 week. Seen 11/1 when signs first started  
 Responded well to metronidazole-then lost appetite again & stool loose again off metro; also only eating  
**PATIENT** Critical Care diet right now (may contribute to loose stool)

Pannsy Dittmar-  
 Durman Current Medications: Metronidazole 50mg- 1 PO BID 11/1-11/5  
 Feline Hills ID diet (would not eat)-ate Critical Care diet (o had at home)  
 Cerenia injection 0.25ml SQ on 11/1/22  
**SPECIES** Lab Results: ALT 249, T4 4.5.  
 Date of Previous IntraPet Ultrasound: No previous.  
 Feline Sedation: Butorphanol 0.1cc IV.  
 Stat Report: Not requested.

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

7/1/06

**WEIGHT**

5.6 Pounds

**INTERPRETED BY**Beth Johnson, DVM  
 DACVIM**IMAGING PERFORMED BY**

Rachel Brillhart RDMS

**HOSPITAL NAME**

Timonium AH

**REFERRING VET**

Dr. Kauder

**INVOICE**

42671

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**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The right kidney measured 3.21 cm. The left kidney measured 4.0 cm.

**Adrenal Glands**

The right adrenal gland is normal in size (0.42 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.48 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**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.

**Liver**

Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses 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. Tortuous, non-pathologically distended cystic and common bile duct noted, which is often a normal anatomic variant in a senior cat.

**Gastrointestinal**

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio), most appreciated at the level of the ileum. Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. The colon contains soft to liquid stool.

### ***Pancreas***

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. 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**

- **Hypoechoic hepatomegaly** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- **Inflammatory bowel disease (IBD) pattern** – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
- **Reactive lymph nodes** – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

## **SECONDARY FINDINGS**

- Age related kidney changes
- **Pancreatic age-related remodeling** – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

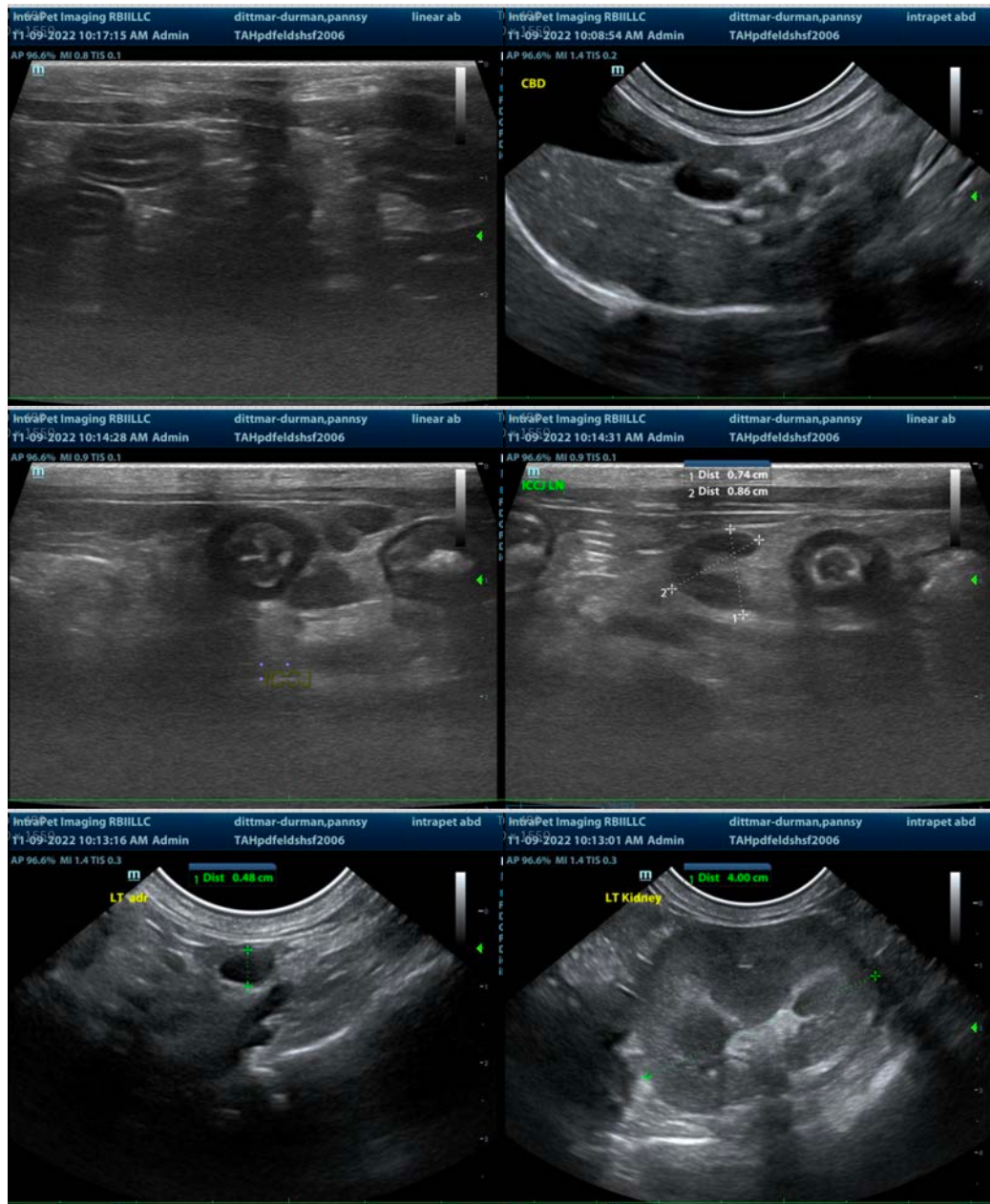
This patient's increased ALT, weight loss, etc. may in part be secondary to hyperthyroidism, and a free T4 is recommended for further evaluation, given the high normal total T4. However, hyperthyroidism typically does not result in a decreased appetite and/or diarrhea. Therefore, additional recommendations include:

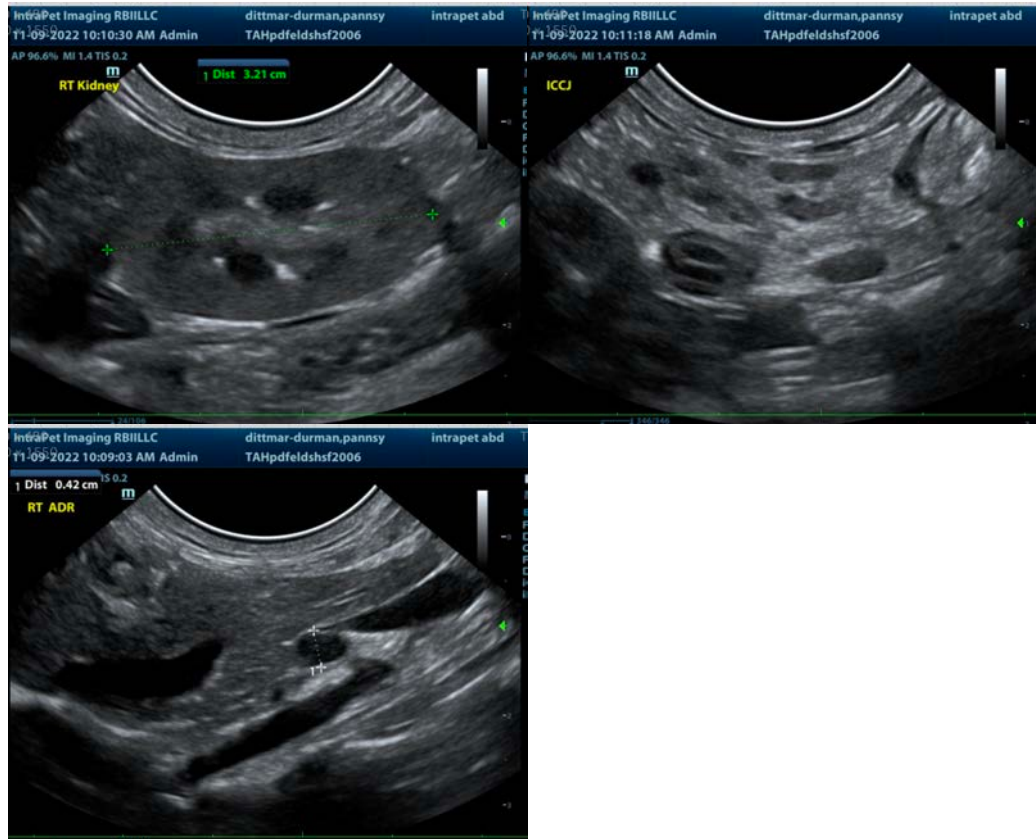
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

A fine needle aspirate of the liver is recommended if patient's coagulation status is appropriate.

Unless a diagnosis is obtained cytologically, biopsies of the GI tract, being sure to include ileum, if possible, could be considered to definitively diagnose and therefore manage any concurrent infiltrative bowel disease.

In the meantime, in addition to managing hyperthyroidism (if diagnosed), other empirical therapies could include a diet change to a hydrolyzed protein diet, empirical deworming with a 5-day course of Panacur, cobalamin supplementation (unless not indicated based on GI panel results), +/- empirical Prednisolone if further workup/tissue sampling, etc. is declined.





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.

**Beth Johnson, DVM, DACVIM**  
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