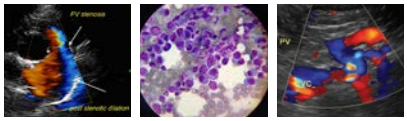
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

11/8/22

PATIENT

Luna Bloyer

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

11/28/10

WEIGHT

6.5 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Baer

INVOICE

42635

PRESENTING CLINICAL SIGNS

Patient presents for evaluation of chronic weight loss and soft stool. Icteric at the time of the ultrasound.

Current Medications: None current but on Gabapentin for scan
Lab Results: CBC: WBC: 38.38 (2.87 - 17.02), Neutrophils: 12.76 (2.3 - 10.29), Lymphocytes: 23.36 (0.92 - 10.29), Monocytes: 1.12 (151 - 600), Platelets: 121 ---> Aggregates detected. Chemistry: TP: 9 (5.7 - 8.9), Globulin: 6 (2.8 - 5.1), ALT: 538 (12 - 130), GGT: 9 (0 - 4), Tbili: 1.9 (0 - 0.9). UA/T4: WNL
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Dexdomitor/Torbugesic.
Stat Report: Not requested.

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.

The right kidney is normal in size (3.76 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.

The left kidney is normal in size (4.4 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.

Adrenal Glands

The right adrenal gland is normal in size (0.40 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.38 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with normal smooth margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. 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 visibly thick, irregular, and hyperechoic in appearance, as is the wall of the cystic and common bile duct. Luminal contents, however, are primarily anechoic, and ther eis no evidence of cystic or common bile duct dilation.

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 mildly thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). 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. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Pancreatic duct dilation is noted. Enhanced hyperechoic ill-defined surrounding fat is noted.

Free Abdomen

A scant amount of anechoic free fluid is noted.

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.

Ringdowns are present at the level of the diaphragm.

ULTRASONOGRAPHIC FINDINGS

- **Hypoechoic hepatomegaly** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered. Given the concurrent gallbladder and bile duct wall changes, chronic resolved or potentially ongoing cholangiohepatitis is likely.

- **Coarse splenomegaly –** can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.

- Acute pancreatitis

- **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 mesenteric lymph nodes –** infiltrative neoplastic disease cannot be ruled out but is considered less likely.

- **Ringdowns –** Suggestive of concurrent pulmonary pathology.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The ultrasound findings described above are consistent with “Triaditis” involving the pancreas, hepatobiliary system, and GI tract. Recommendations include:

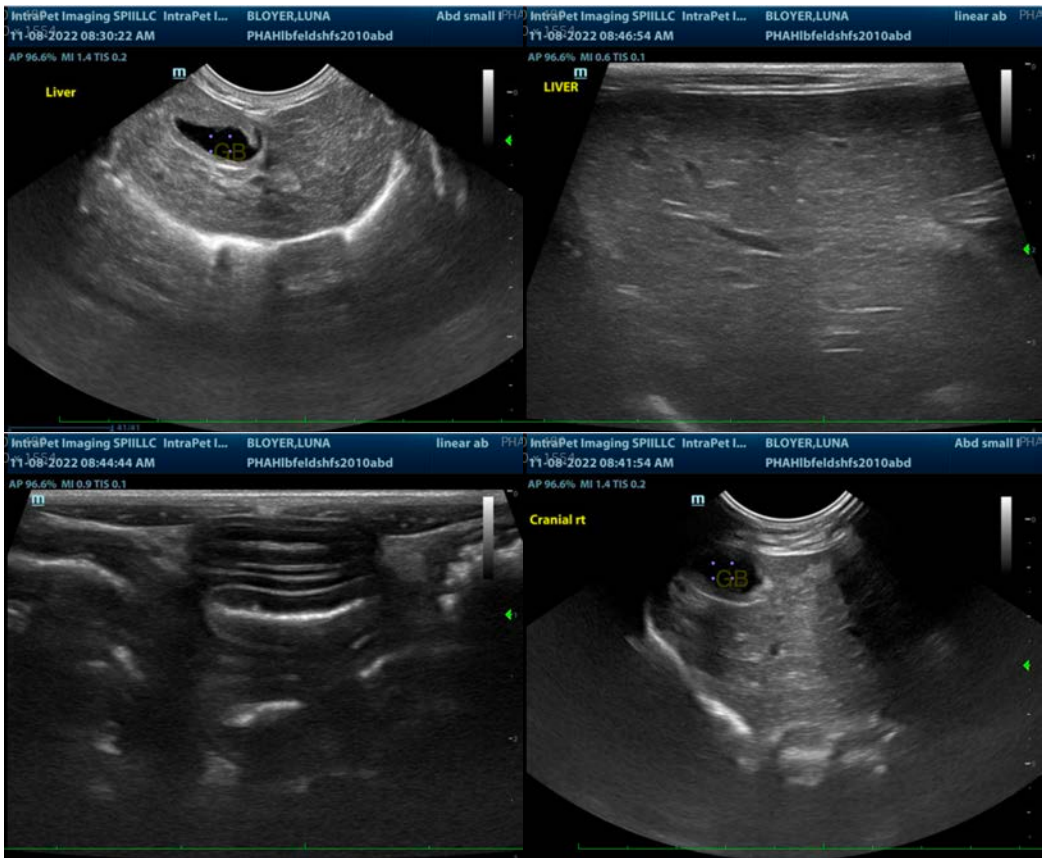
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

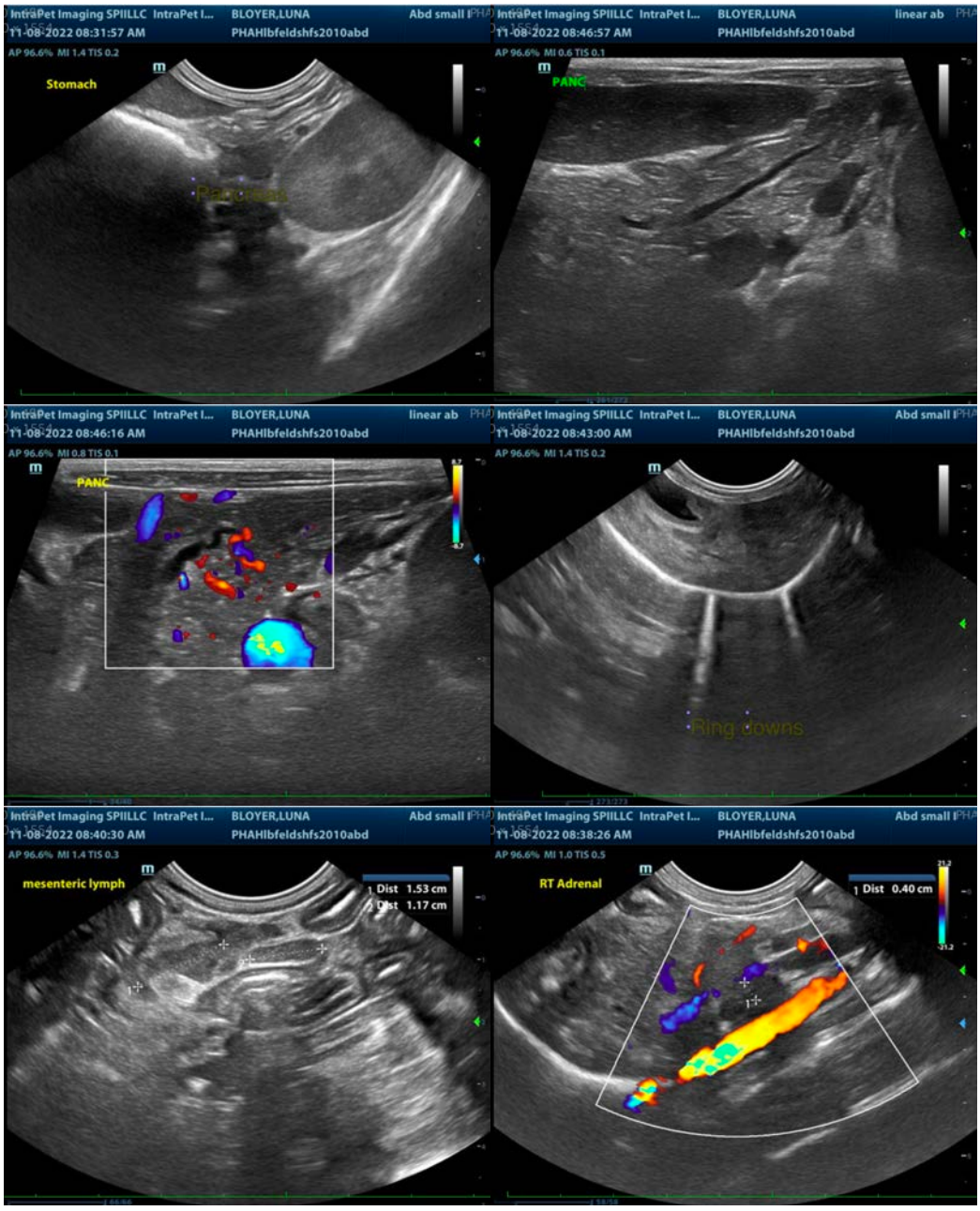
Given the concurrent hyperglobulinemia, a fine needle aspirate of the liver is recommended if patient's coagulation status is appropriate.

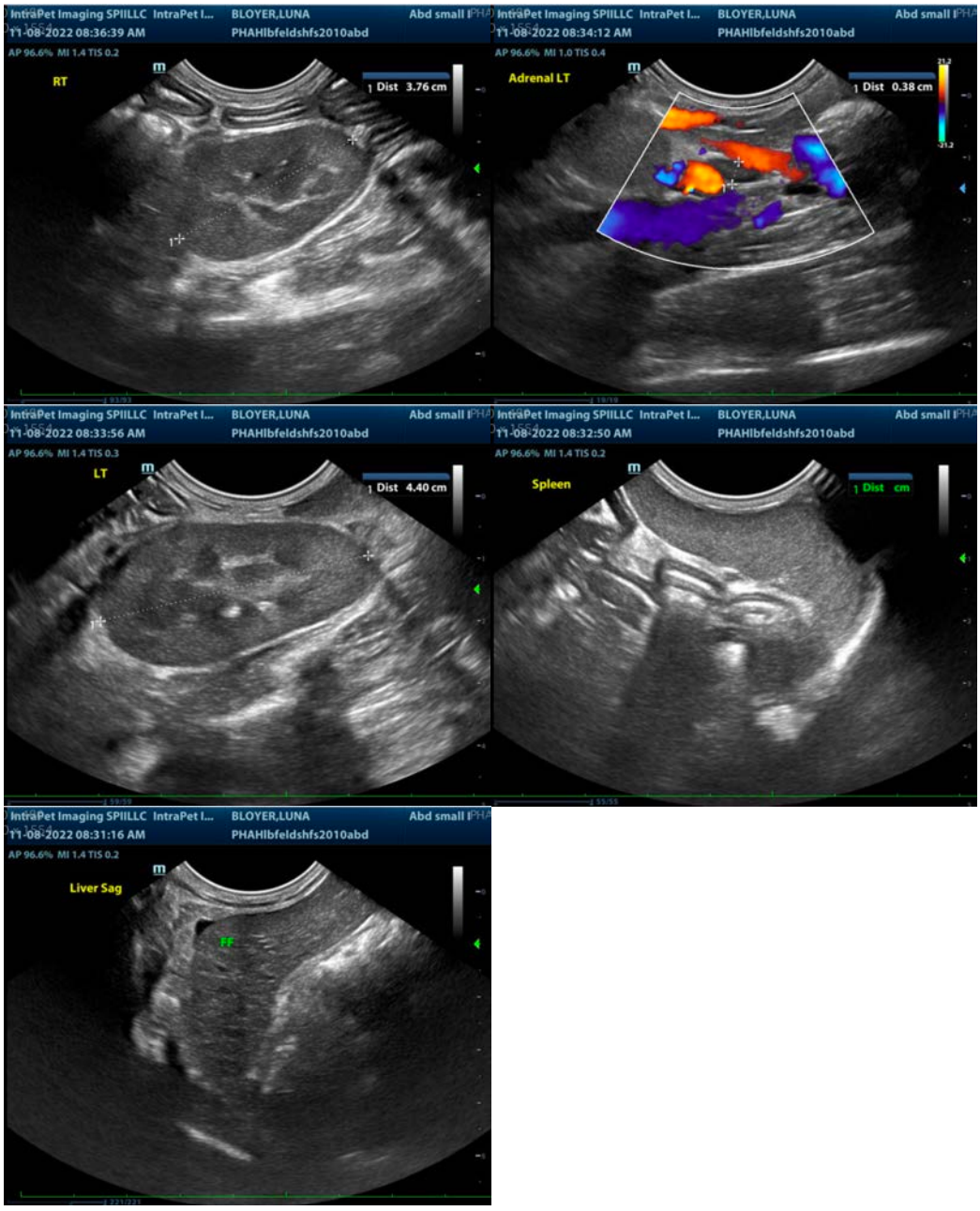
Because of the ringdowns, three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

In the meantime, treatment recommendations include fluid therapy, anti-emetics, gastroprotectants, hepatic nutraceuticals such as ursodiol and/or Denamarin, and broad spectrum antibiotics. Nutritional support is critical to prevent/manage concurrent hepatic lipidosis, so appetite stimulants and/or, if indicated, feeding tube placement is also recommended.

Additionally, given the pancreatitis, if pain management is clinically indicated then it is recommended, and a probiotic such as Visbiome or Proviable is recommended, given the concurrent reported diarrhea.




IntraPet Imaging SPIILLC IntraPet I... BLOYER,LUNA Abd small I
11-08-2022 08:31:57 AM PHAHlbfeldshfs2010abd
AP 96.6% MI 1.4 TIS 0.2
Stomach
Pancreas
IntraPet Imaging SPIILLC IntraPet I... BLOYER,LUNA linear ab
11-08-2022 08:46:57 AM PHAHlbfeldshfs2010abd
AP 96.6% MI 0.6 TIS 0.1
PANC
IntraPet Imaging SPIILLC IntraPet I... BLOYER,LUNA linear ab
11-08-2022 08:46:16 AM PHAHlbfeldshfs2010abd
AP 96.6% MI 0.8 TIS 0.1
PANC
IntraPet Imaging SPIILLC IntraPet I... BLOYER,LUNA Abd small I
11-08-2022 08:43:00 AM PHAHlbfeldshfs2010abd
AP 96.6% MI 1.4 TIS 0.2
Ring downs
IntraPet Imaging SPIILLC IntraPet I... BLOYER,LUNA Abd small I
11-08-2022 08:40:30 AM PHAHlbfeldshfs2010abd
AP 96.6% MI 1.4 TIS 0.3
mesenteric lymph
1 Dist 1.53 cm
2 Dist 1.17 cm
IntraPet Imaging SPIILLC IntraPet I... BLOYER,LUNA Abd small I
11-08-2022 08:38:26 AM PHAHlbfeldshfs2010abd
AP 96.6% MI 1.0 TIS 0.5
RT Adrenal
1 Dist 0.40 cm



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
Beth.Johnson@sonopath.com