

**DATE PRESENTING CLINICAL SIGNS**

8/15/22 Inappropriate defecation with hematochezia, ongoing on and off for 1 mo. Recent weight loss

PATIENT Current Medications: None yet.

Stella Ritzl Lab Results: Bloodwork 8/15 wnl including T4.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

*****This was a post-prandial study, which can limit the observation of subtle pathology of the GI tract, pancreas, and gallbladder.***

DSH

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.

SEX

Spayed Female

AGE

10/25/09

WEIGHT

9.76 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

The right kidney is normal in size (3.75 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 (3.47 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 (0.34 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Eastern AH

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.

REFERRING VET

Dr. Sole

Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. A 0.5 cm x 0.8 cm hyperechoic nodule is noted in the right liver, near the gallbladder. Visible vasculature and biliary tree appear normal without distension or congestion.

INVOICE

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The gallbladder is almost completely empty, and there is no pathology noted in the area of the gallbladder. No evident gallbladder debris visible.

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. **Complete visualization of the far wall is partially inhibited by gas, and therefore subtle pathology cannot be 100% ruled out.

The visible small intestine appears to demonstrate 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. mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction or foreign material noted. **Better examination/visualization of the GI tract is recommended following patient fasting.

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 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 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

- **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.
- **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.
- **Liver nodule** – Differentials for a discrete liver nodule include primarily benign changes such as nodular hyperplasia, fibrosis of an old hematoma, granuloma, etc.; however, while considered less likely, primary hepatic neoplasia, infiltrative round cell neoplasia and metastatic disease can mimic benign lesions and cannot be definitively ruled out.
- **Reactive mesenteric lymph nodes** – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

SECONDARY FINDINGS

- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

**Examination of the gastrointestinal tract, gallbladder, and pancreas is better performed in a fasted patient, if possible.

Given this patient's reported hematochezia and subtle gastrointestinal tract changes in this ultrasound include a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory further evaluation of GI and pancreatic function.

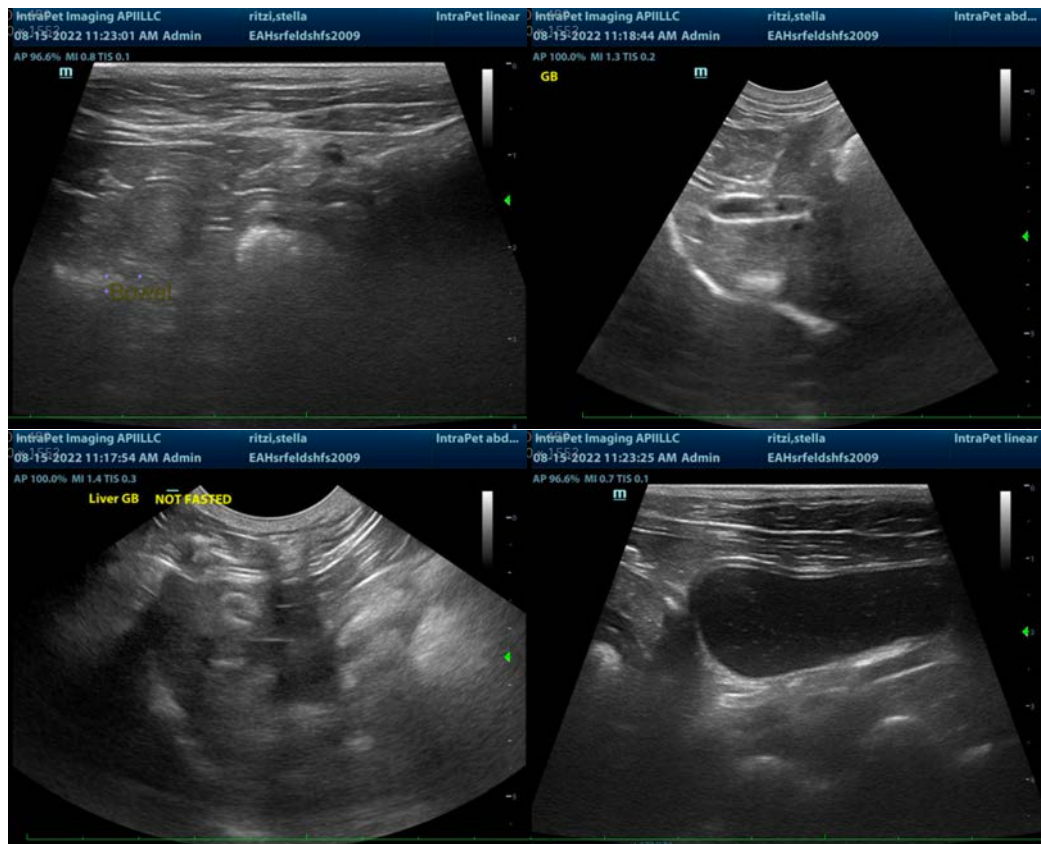
A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

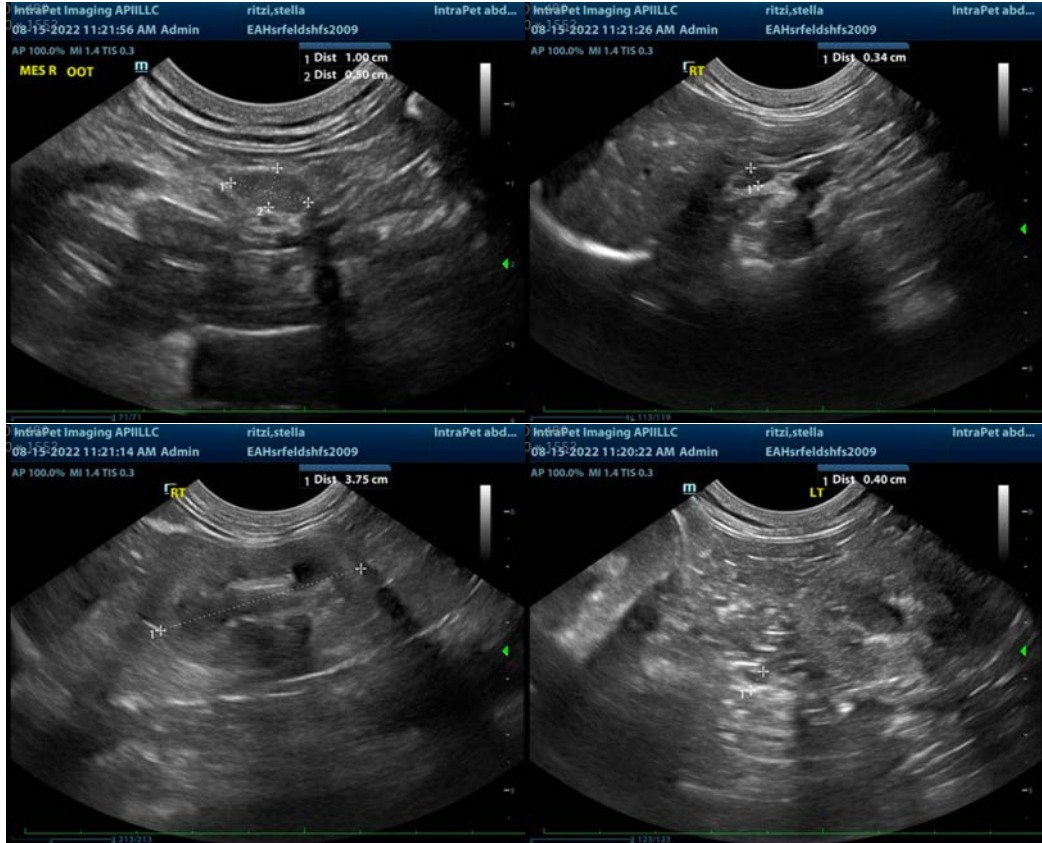
In the meantime, empirical deworming with a 5-day course of Panacur is recommended, as is medical management of possible colitis with a transition to a higher fiber colitis diet or addition of fiber to current diet, as well as potentially an antibiotic such as Metronidazole or Tylosin. If this patient is struggling with constipation, a stool softener such as lactulose could be considered.

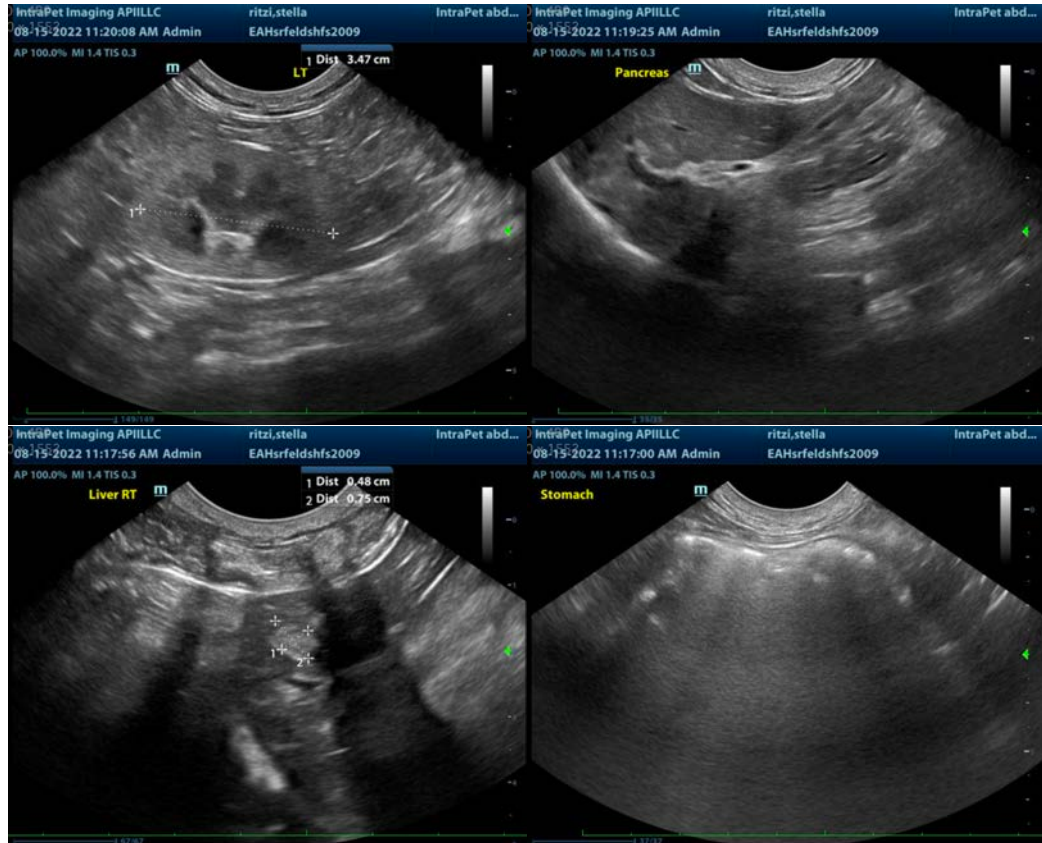
Ultimately, if clinical signs persist, recheck fasted imaging is recommended, followed possibly by both upper GI endoscopy and lower GI colonoscopy for biopsies.

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.

Monitoring of the liver nodule is recommended with a recheck ultrasound in 6-8 weeks.







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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