

**DATE PRESENTING CLINICAL SIGNS**

1/16/23

**PATIENT**

Milo Lynch

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

4/17/16

**WEIGHT**

12.4 Pounds

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**HOSPITAL NAME**

Fork VH

**REFERRING VET**

Dr. Doherty

**INVOICE**

20605

History: Anorexic for 4 days with a few episodes of vomiting 2-3 days ago. No vomiting within the past 36 hrs. No bowel movement within the past 3-4 days as well. at times cat appears interested in food then walks away. Cat has continued to drink some water and urinate. Cat is 100 % indoors but does have a history of chewing up some things in the house. No recent incidents known to owner, but cat did vomit up a small piece or strand from an artificial Christmas tree or wreath. Cat does have a history of periodic soft stool but no consistent episodes of vomiting. Physical examination - Temp 101.7, with a quiet and subdued behavior, Abd. - no abnormalities on palpation or signs of abdominal pain. CV/Resp. - mild tachycardia and slight increase in respiratory rate but cat also anxious. No murmur or arrhythmia, MM - pink, tacky, Oral - no significant gingivitis or dental disease. Neuro - no deficits but quiet and subdued behavior.

Current Medications: Cerenia 16 mg QD, SQ fluids administered - 2 consecutive days

Lab Results: Pending.

Radiographs: No GI obstructive pattern or FB noted. Small, empty intestine with a ropey appearance. Small amount of feces in the rectum/ descending colon but no suggestive of constipation or obstruction. Thorax - N/R

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

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

Urinary bladder is adequately 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.

Left kidney is normal is size (3.97 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.

Right kidney is normal is 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.

**Adrenal Glands**

Left adrenal gland is normal in size (0.44 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.48 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

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 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. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### ***Gastrointestinal***

The visible stomach wall is normal in thickness 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). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas. The submucosal layer is subjectively prominent and hyperechoic.

### ***Pancreas***

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

### ***Free Abdomen***

There is no evidence of peritoneal effusion. 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.

## **ULTRASONOGRAPHIC FINDINGS**

### **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.
- The colon is the upper end of normal in thickness, but the prominent submucosal layer is suggestive of concurrent large bowel disease, potentially parasitic or infectious disease, however, infiltrative inflammatory or even neoplastic disease cannot be ruled out.
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- Chronic active pancreatitis

### **Secondary Findings**

- Mild gallbladder debris – Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness, however, it can also be associated with hepatobiliary disease in

cats and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

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

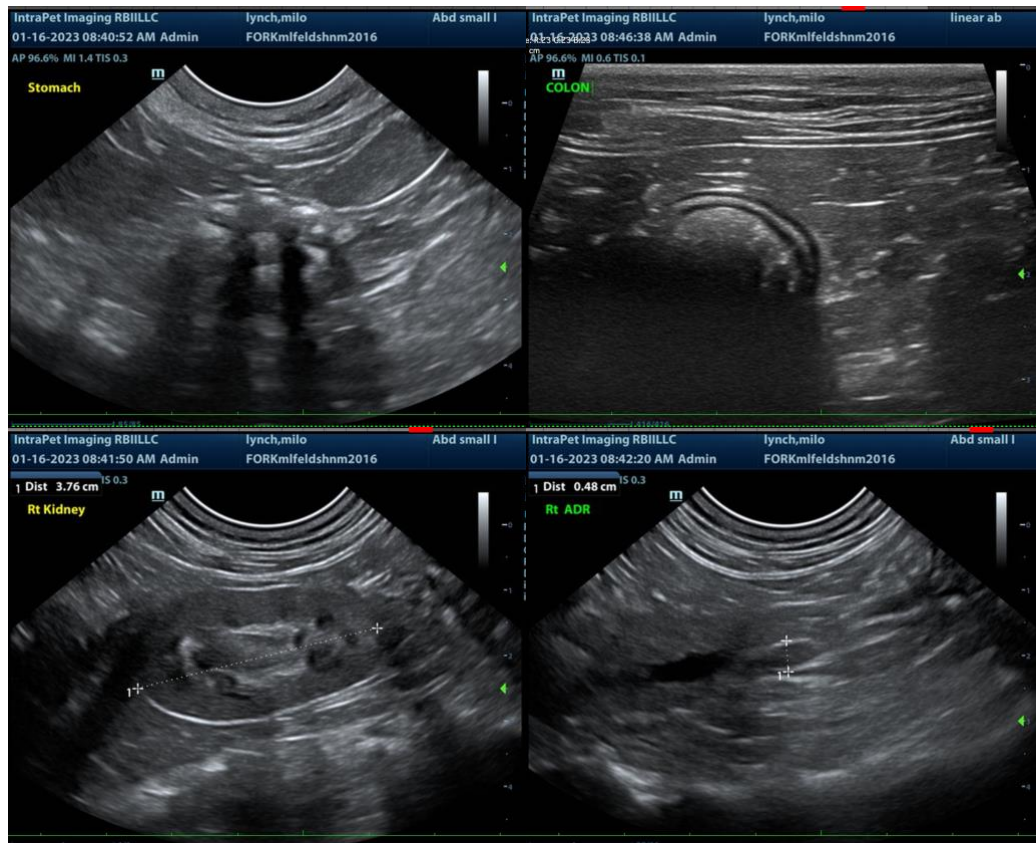
In addition to the reportedly already pending general metabolic health screen, a fecal exam is recommended if not recently evaluated.

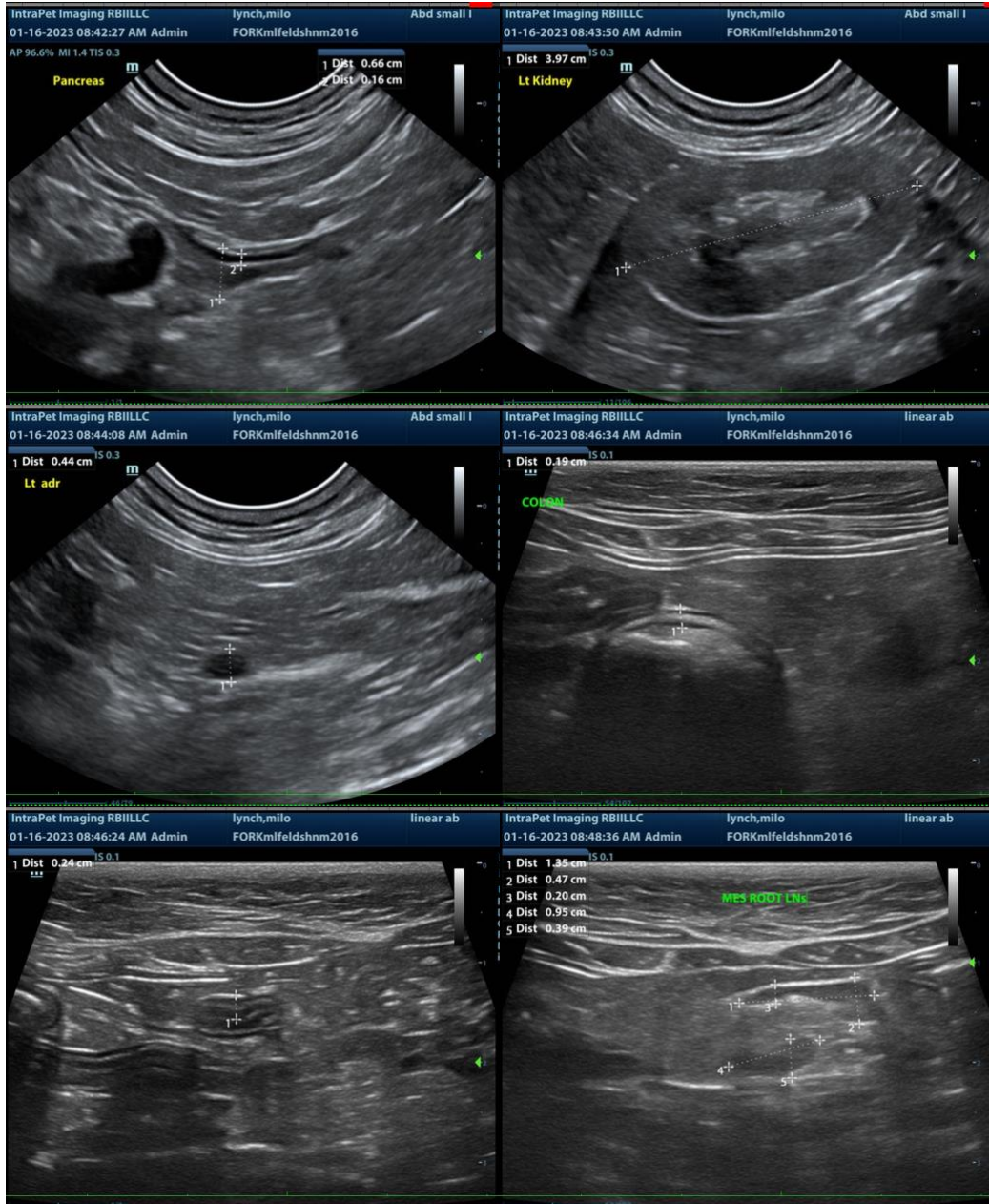
A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

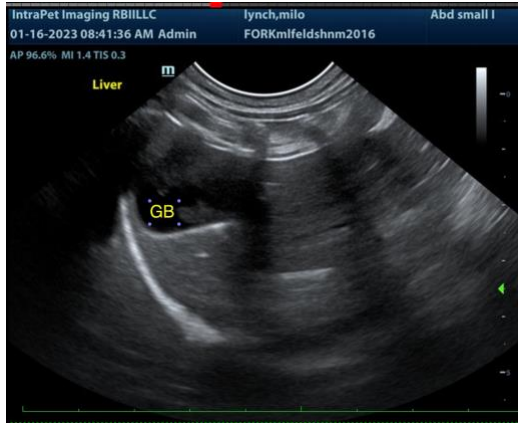
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

Ultimately, upper and lower endoscopy for biopsies of large and small bowel may be necessary to definitively diagnose, and therefore manage this patients gastrointestinal signs.

In the meantime, empirical deworming with a 5-day course of Panacur is recommended, as is a probiotic, such as Visbiome or Proviabie and potentially transition in diet based on trial and error response, beginning potentially with a hydrolyzed protein diet or alternatively, a higher fiber colitis diet, etc.







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