**DATE PRESENTING CLINICAL SIGNS**

2/16/22

History: Pet presented on 2/4/2022 for weight loss and diarrhea.

**PATIENT**

Pet has been "sharting" - Pet will be eating and will pass gas and leaves diarrhea behind. Owner says pet has always had diarrhea. E/d normally No vomiting. Energy normal. 2.5 lb weight loss since 7/2021. Grade 1-2/6 murmur. Small amt of blood on thermometer but rectal did not reveal blood - only loose stools.

Jimmy Murdock

**SPECIES**

Current Medications: Metronidazole 62 mg BID.

Feline

Lab Results: Attached separately.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX****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.

Neutered Male

**AGE**

12/2/10

The left kidney is the upper end of normal limits in size (4.59 cm) with increased cortical echogenicity. Normal smooth peripheral margination and shape are maintained. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**WEIGHT**

9.02 Pounds

The right kidney is the upper end of normal limits in size (4.7 cm) with increased cortical echogenicity. Normal smooth peripheral margination and shape are maintained. 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 BY**Beth Johnson, DVM  
DACVIM**Adrenal Glands**

Bilaterally uniformly plump egg-shaped adrenals, hypoechoic in echogenicity. The left adrenal gland measured 0.35 cm. The right adrenal gland measured 0.52 cm.

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**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.

**HOSPITAL NAME**

Frederick Road VH

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

**REFERRING VET**

Dr. Franchini

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.

**INVOICE**

35697

**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, yet mildly fluid distended. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness. Normal layering is maintained except for a diffusely disproportionately thick muscularis layer relative to mucosa, most appreciated in the jejunum and ileum.

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 colon is diffusely thick, measuring between 0.21-0.30 cm thick. Normal layering is maintained. Contents are consistent with normal stool.

### ***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of peritoneal effusion. Hypoechoic, normal shaped lymph nodes are noted throughout, including pancreaticoduodenal nodes, mesenteric nodes, and sublumbar nodes. A representative node measures 2.0 cm long and 0.5 cm thick.

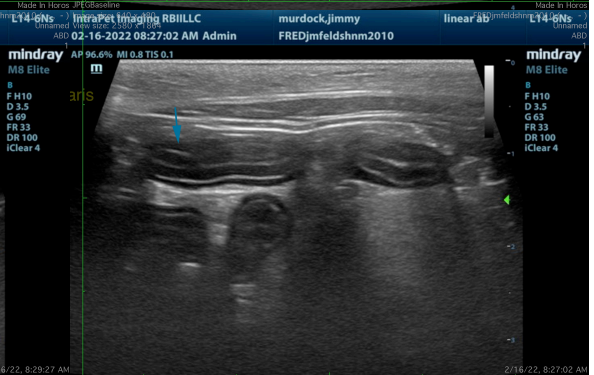
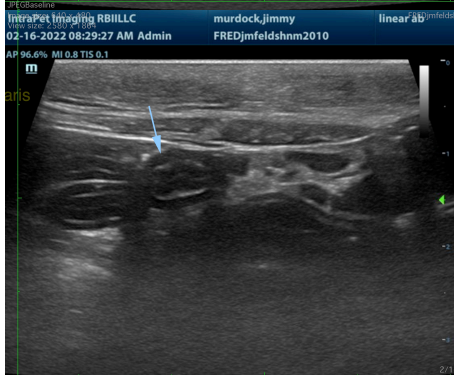
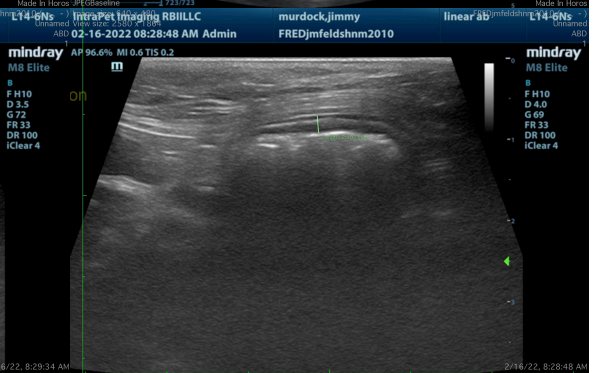
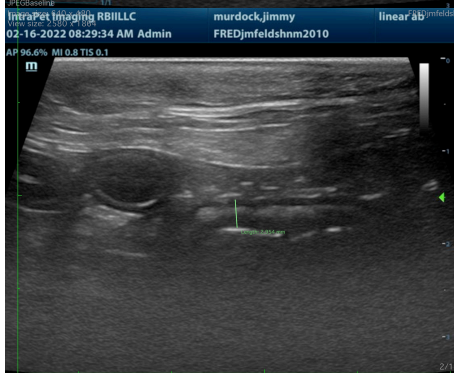
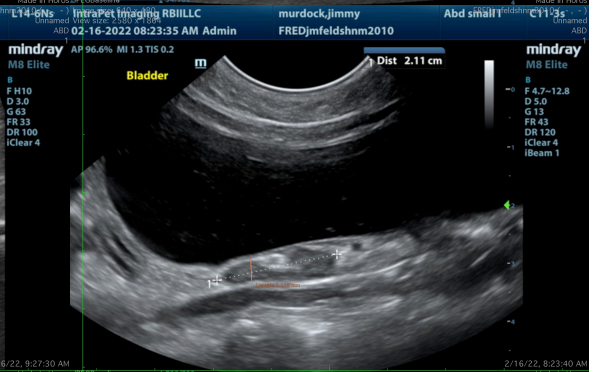
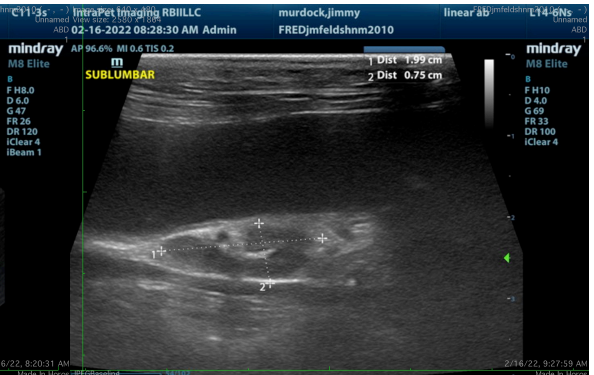
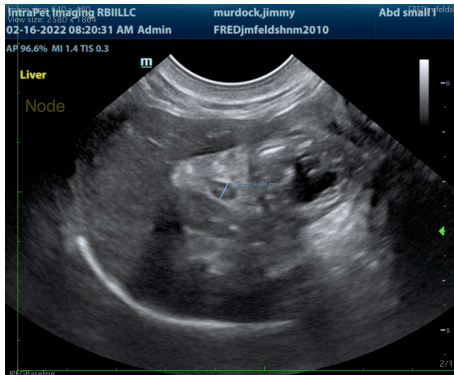
## **ULTRASONOGRAPHIC FINDINGS**

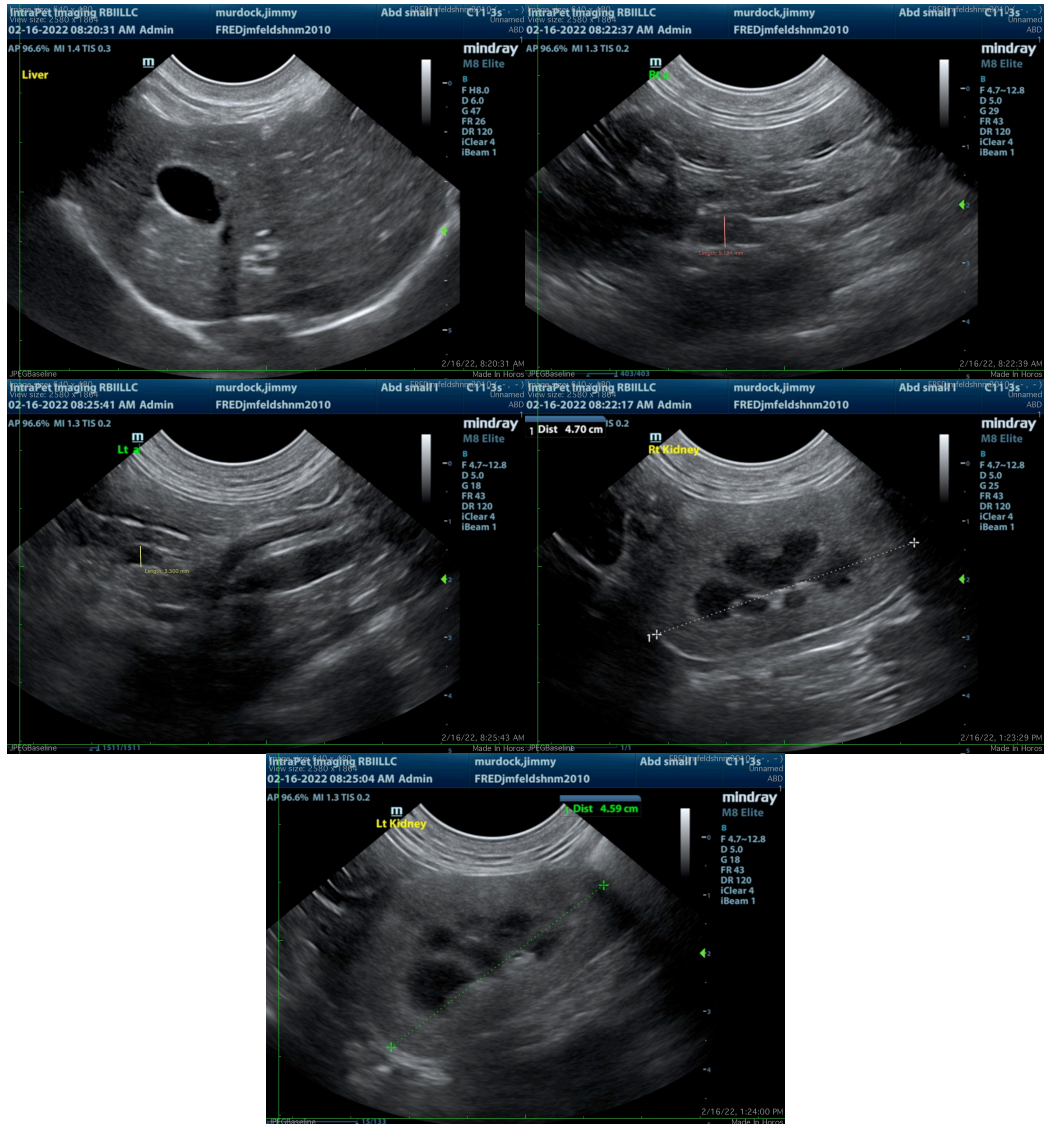
- Thick muscularis – This finding has been reported in cats with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.
- Thick colon – Suggestive of infiltrative, inflammatory or neoplastic disease such as lymphoma.
- Lymphadenopathy – Most likely reactive. However, neoplastic infiltration cannot be ruled out.
- Hyperechoic kidneys of normal size – most consistent with normal fat deposition. These kidneys are the upper limit of normal, so infiltrative neoplasia such as lymphoma, while considered unlikely, is possible.

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

Recommendations include a gastrointestinal malabsorption panel to include TLI, PLI, folate and cobalamin to Texas A&M GI laboratory, followed by upper GI endoscopy as well as colonoscopy for biopsies of the gastrointestinal tract, being sure to include the ileum if possible. Given the weight loss, which is likely due to gastrointestinal disease, if proteinuria persists with a clean sediment, a urine protein/creatinine ratio would be recommended to rule out concurrent protein loss through the kidneys. A fine needle aspirate of the lymph nodes prior to endoscopy/colonoscopy could be considered if possible and if patient's coagulation status is appropriate, with the goal of trying to rule out lymphoma prior to a more invasive step such as biopsies.

In the meantime, therapeutic recommendations include transition to a novel or hydrolyzed protein diet, empirical deworming with a 5-day course of Panacur, as well as continuing a probiotic for the diarrhea. If lymph node aspirate and/or biopsies are not pursued, other empirical therapies could include steroids. An echocardiogram is recommended, especially before any anesthetic procedure, given the reported heart murmur.





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