

IMAGING PERFORMED BY

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Clinical Sonography & Telecytology

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**DATE PRESENTING CLINICAL SIGNS**

6/17/22 Chronic vomiting. No vomiting for about 6 weeks but then it restarted within the last 7ish days.

**PATIENT**

Blackie Jones  
Current Medications: Cerenia 16mg (1/4 SID) and was previously on Medrol 4mg (1 SID then 1 EOD until gone).  
Date of Previous IntraPet Ultrasound: 8/6/21.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**SPECIES**

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

DSH

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**SEX**

Neutered Male

The left kidney is normal in size (3.64 cm), but irregular in shape (largely due to an infarct visualized at the caudal pole). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths or hydroureter. Renal vasculature is normal.

**AGE**

8/6/12

The right kidney has a normal shape and size (4.55 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

12.5 Pounds

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.30 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**IMAGING PERFORMED BY**

Rachel Brillhart RDMS

**Spleen**

The spleen is subjectively normal in size (0.74 cm in width at the level of the hilus, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**HOSPITAL NAME**

Greenbrier Vet Clinic

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**REFERRING VET**

Dr. Streett

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

**INVOICE**

38845

**Gastrointestinal**

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measured 0.41 cm. Jejunum wall measured 0.30 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are clusters of prominent mesenteric lymph nodes, particularly near the root of the mesentery, where a cluster measures at 0.5, 0.5, and 0.51 cm, and are surrounded by hyperechoic mesentery.

## **ULTRASONOGRAPHIC FINDINGS**

- Subjectively thickened small intestine with prominent muscularis layer – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Decreased corticomedullary distinction in both kidneys with a left renal infarct – The bilateral renal findings are consistent with age-related change.

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

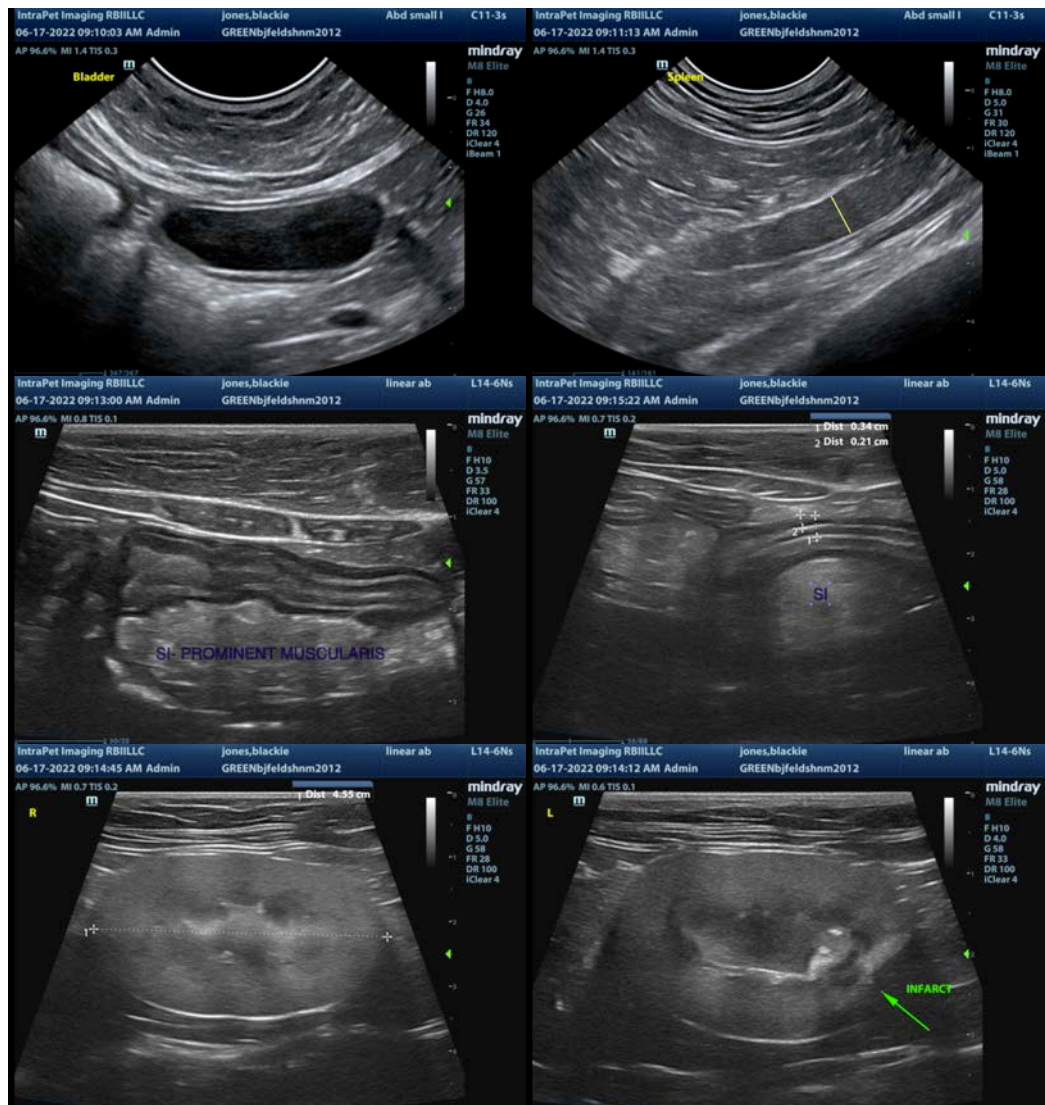
The small intestine appears subjectively thickened and has a prominent muscularis layer. Additionally, there are inflamed, prominent mesenteric lymph nodes in the region. These findings are most suggestive of generalized inflammatory disease of the small intestine rather than neoplastic change, although this can be a continuum.

- Recommend evaluation for metabolic disease including thyroid levels and a quantitative PLI.

If metabolic disease is thought unlikely, then consider primary GI causes such as food allergy/dietary sensitivity, GI parasitism, pancreatitis, dysbiosis, IBD, and less likely intestinal neoplasia.

- Consider a novel protein/hydrolyzed protein prescription diet.
- Recommend a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to look further for signs of small intestinal and pancreatic disease.

- Recommend symptomatic treatment for gastroenteritis/pancreatitis.
- Consider attempting a fine needle aspirate of a mesenteric lymph node – these are relatively small and may be challenging, but it would be a good non-invasive way to further evaluate the situation.
- If there is no response to a dietary change, etc., then consider obtaining GI biopsies, ideally with lymph node biopsies as well.





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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