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**DATE PRESENTING CLINICAL SIGNS**

10/14/22 Generalized loss of muscle mass, 9 ounce weight loss since 9/12/22, decreased appetite, increase of regurgitation and vomiting. Grade 1/6 murmur. Bloodwork 9/12/22-- CBC/chem/T4/FT4/UA/fecal float/proBNP) basically normal (T4 of 3.2 in gray area, but FT4 WNL; mild decrease UspG @ 1.034)

**PATIENT**

Olivia Wilson

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

4/1/11

**WEIGHT**

9 lb 15 oz

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**HOSPITAL NAME**

Cat Sense Feline  
Hospital

**REFERRING VET**

Dr. Tuzo

**INVOICE**

42099

Current Medications: 10/10: Simethicone susp 0.3 ml PO during exam; LRS 75 ml SC; Cerenia (10 mg/ml) 0.4 ml SC in fluid hump. Owner to start Mirataz at home tonight. Sent one 16 mg Cerenia tablet to give @ 1/4 tab PO once daily PRN for nausea. Next doe would be due 10/11 in PM  
Radiographs: 10/10 show large amount of gas in stomach, intestines, poss some soft stool in colon. No overt masses or mass effect noted. Portions of chest visible appeared unremarkable  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**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.

The left kidney has a normal shape and size (3.71 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.72 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.50 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.45 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.

**Spleen**

The spleen is prominent and somewhat scalloped, measuring 1.1 cm in width at the level of the hilus. The pancreas is hypoechoic and prominent. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**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.

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

### ***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. Jejunum wall measures 0.24 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 hypoechoic as 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***

There is a small amount of free abdominal fluid. There are numerous prominent mesenteric lymph nodes visualized. Examples measure 0.54, 0.48, 0.40, and 0.80 cm. The omentum is normal.

## **ULTRASONOGRAPHIC FINDINGS**

- Borderline large “plump” spleen with scalloped edges – Possible differentials include congestion, infiltration, inflammation, etc. This can also be normal for a larger cat.
- Hypoechoic, prominent pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Subjectively thickened small intestine with prominent muscularis and mucosal fogging – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.
- Diffusely prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Small amount of free abdominal fluid

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

The small intestine appears prominent and somewhat “ropey” with a prominent muscularis layer. Given the history of weight loss and vomit and vomiting, this could be an indication of small intestinal disease. Additionally, there are prominent mesenteric lymph nodes visualized. Consider such differentials as food allergy/dietary intolerance, chronic pancreatitis, dysbiosis, malabsorption, IBD, and intestinal neoplasia.

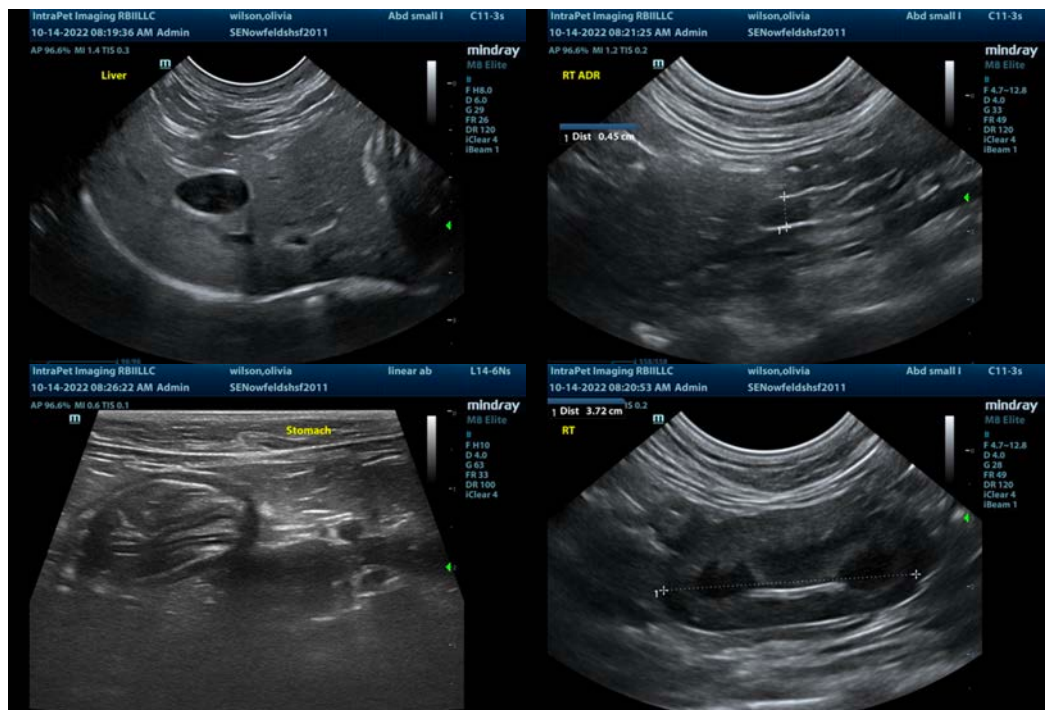
- Recommend a novel protein/hydrolyzed protein prescription diet.

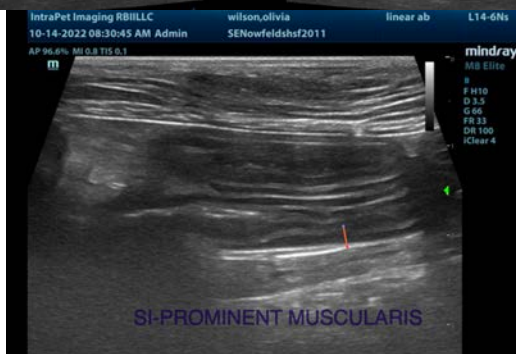
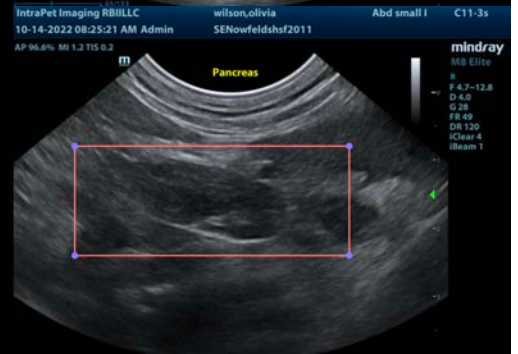
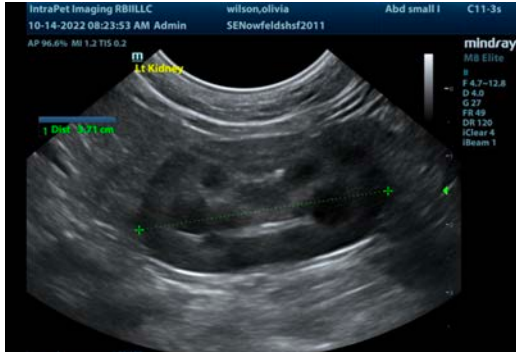
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy.
- Consider a fine needle aspirate of a mesenteric lymph node.
- If regurgitation is significant, consider an acetylcholine receptor antibody test, an evaluation of the esophagus with either a barium esophagram, endoscopy, or a fluoroscopic barium swallow.
- Consider GI biopsies if the patient is not improving with symptomatic therapy.

The pancreas is hypoechoic and prominent. This could represent previous episodes of pancreatitis or current mild pancreatitis. Correlate findings with a qualitative fPLI level.

The spleen appears somewhat “plump” in size with scalloped edges. No focal lesions are visualized, but a fine needle aspirate of the spleen could be considered (provided coagulation parameters are normal).

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





**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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