

**DATE PRESENTING CLINICAL SIGNS**

3/22/23

Not eating well x 10 days, not eating at all past 2 days. No vomiting. Loose stools about 2 weeks ago but cleared up, stools normal recently. GI palpates thickened, pet5 is thin BCS 3.5/9

**PATIENT**

Wallace Geiger

Current Medications: 3/21/23: Cerenia 0.45ml SQ, Convenia 0.45ml SQ, Dexamethasone 0.25ml SQ, LRS 100ml SQ

Lab Results: HCT 25.2%, Neut 13.02, Plt 66,000, Eos 0, Baso 0, BUN 13, T Bili 2.1, FpL abnormal

Radiographs: Poor detail SI.

**SPECIES**

Feline

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

DSH

Imaging Performed By: Rachel Brillhart, RDMS.

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

Neutered Male

**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.

**AGE**

3/30/20

The left kidney has a normal shape and size (3.96 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.

**WEIGHT**

10.08 Pounds

The right kidney has a normal shape and size (4.29 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.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.33 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.

**HOSPITAL NAME**

Jacksonville VH

The right adrenal gland is normal in size measuring 0.56 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.

**REFERRING VET**

Dr. Kablis

**Spleen**

The spleen is large (1.0 cm in width). The spleen echotexture is heterogenous and mottled, 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.

**INVOICE**

46080

**Liver**

The liver is subjectively normal in size, and hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. 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 0.29 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. Prominent pancreatic duct noted.

### ***Free Abdomen***

There is a large amount of free abdominal fluid. Occasional prominent lymph nodes are visualized. Examples measure 0.31 and 0.28 cm. The omentum appears diffusely hyperechoic and slightly irregular in appearance.

### ***Other***

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

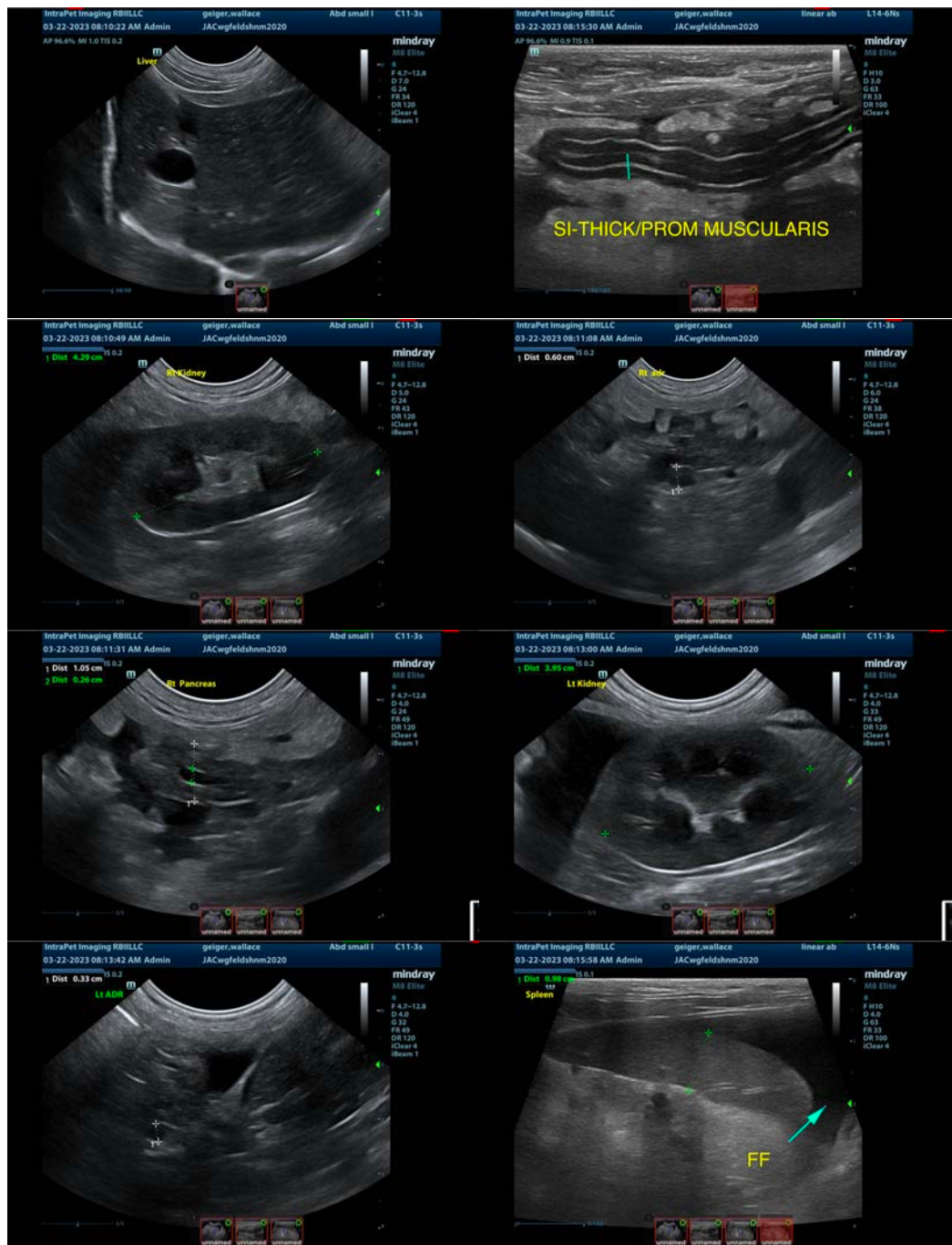
## **ULTRASONOGRAPHIC FINDINGS**

- Large, mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Mottled, prominent pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Heterogeneous, hypoechoic liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Diffusely significantly thickened small bowel with a very prominent muscularis layer – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.
- Free abdominal fluid and prominent irregular omentum – Findings could be consistent with inflammation, carcinomatosis, etc.

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

There is a large amount of free fluid visible on today's scan with diffusely hyperechoic, slightly irregular mesentery and thickened, somewhat clumped small intestine. Additionally, the liver is somewhat

heterogeneous, and the spleen and pancreas are prominent. These findings are concerning for diffuse disease. Consider such differentials as underlying neoplasia (round cell neoplasia, carcinoma, other, etc.), FIP, sterile peritonitis, etc. Recommend sampling free abdominal fluid for fluid analysis and cytology. Additionally, recommend a fine needle aspirate of the liver (provided coagulation parameters are normal) and 3-view thoracic radiographs. If a diagnosis cannot be obtained based on cytologic sampling, surgical biopsies of the small bowel, liver +/- spleen and pancreas and omentum may be necessary. If FIP is strongly suspected, you could consider a PCR for FIP from Auburn University, which can be helpful in some circumstances.





**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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com