

**DATE PRESENTING CLINICAL SIGNS**

1/27/23

History of soft/loose stools, initially responded to dewormer and change in diet. Per o, company changed diet formulation and symptoms returned, recommended recheck US to evaluate GI changes and reevaluate need for biopsy etc.

**PATIENT**

Sissy Robinson

Current Medications: visbiome probiotic, metronidazole 20mg/kg BID x10d, panacur 50mg/kg PO x3d  
 Lab Results: CBC/chem 17 WNL 8/2022.

**SPECIES**

Feline

Date of Previous IntraPet Ultrasound: 9/13/22. See attached.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Not requested.

**BREED**

DSH

Imaging Performed By: Rachel Brillhart, RDMS.

**SEX**

Spayed Female

**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 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**AGE**

8/27/12

The left kidney has a normal shape and size (3.45 cm). Overall echogenicity is normal with adequate 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**

8.23 Pounds

The right kidney has a normal shape and size (3.2 cm). Overall echogenicity is normal with adequate 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.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.52 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**

Hickory VH

The right adrenal gland is normal in size measuring 0.62 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. McCourt

**Spleen**

The spleen is large in size with scalloped edges and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There are numerous, somewhat poorly defined hyperechoic nodules throughout the splenic parenchyma.

**INVOICE**

20800

**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 gall bladder 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.

### ***Gastrointestinal***

The stomach contains mild fluid. It measures at a normal thickness of <0.36 cm 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.

Many of the visualized areas of duodenum, jejunum and ileum have a uniform diameter with mild to moderate fluid distension. This bowel appears diffusely mildly thickened with a prominent muscularis layer, measuring approximately 0.27 cm. There is a focal section of bowel, which appears severely thickened, measuring at 0.51 cm with complete loss of layering. This persistent focal thickening is most consistent with mass effect.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with non-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 normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

There is no free fluid noted. There is a significant diffuse mesenteric lymphadenopathy present with large rounded hypoechoic lymph nodes, examples of these measures 0.59 cm, 0.46 cm, and 0.37 cm. The omentum is hyperechoic around the lymph nodes and the abnormal section of bowel.

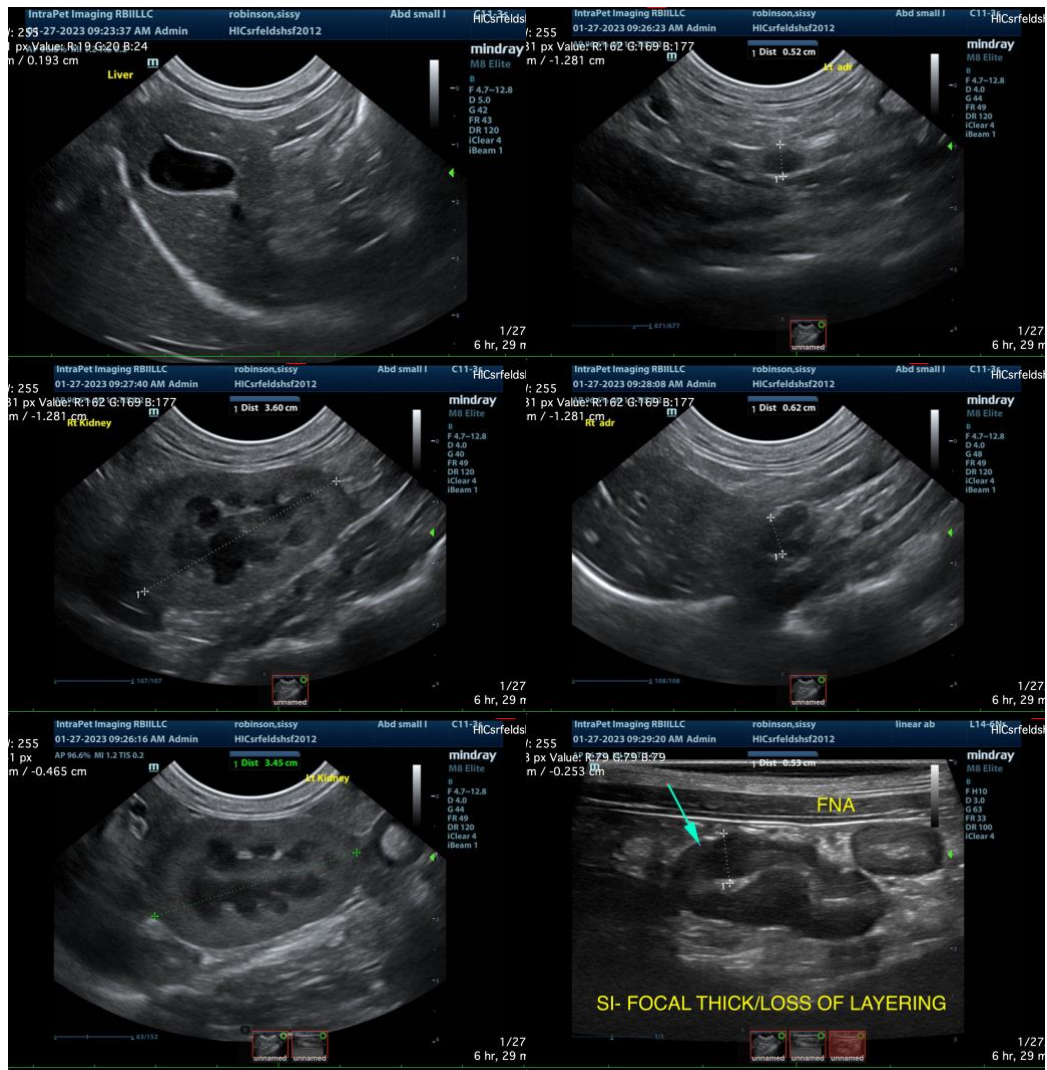
## **ULTRASONOGRAPHIC FINDINGS**

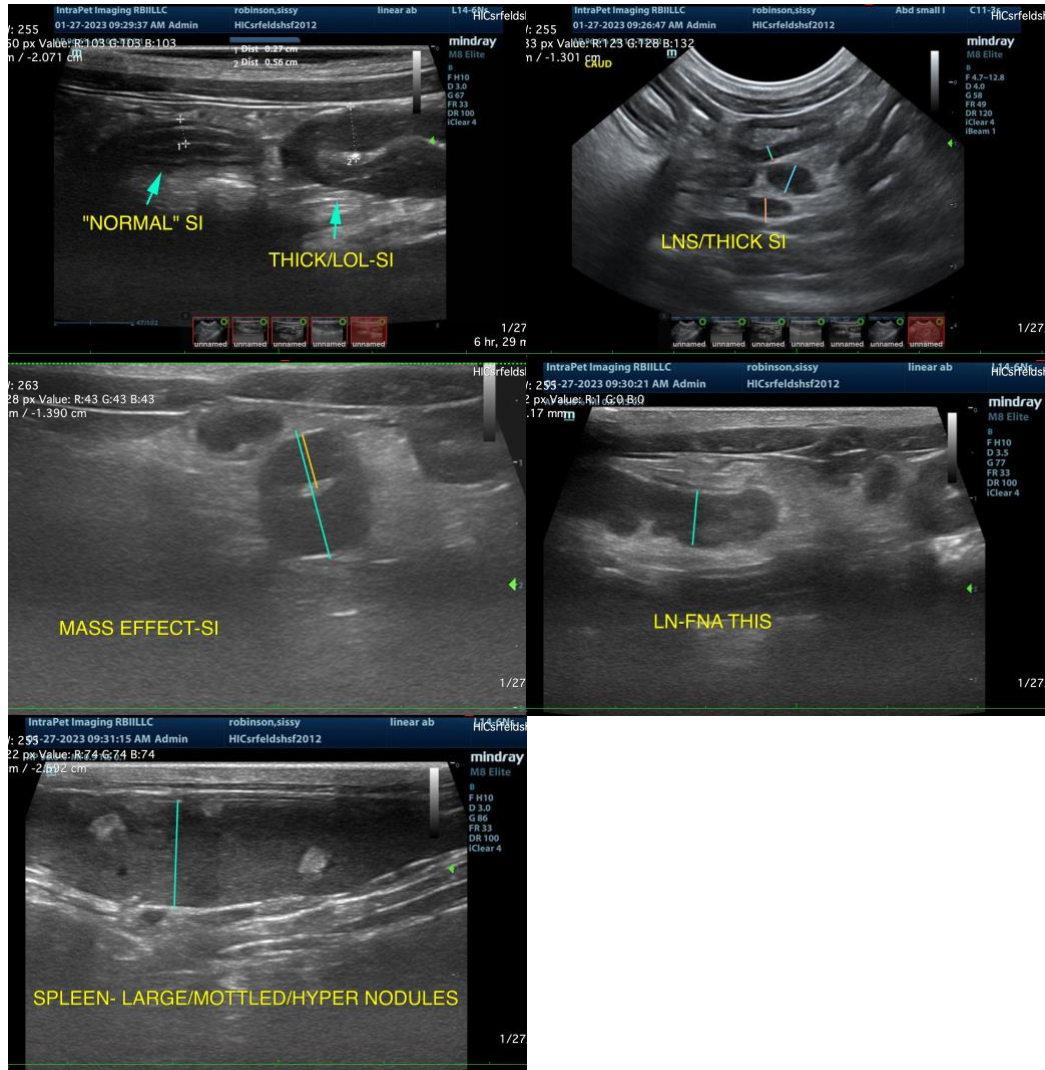
- Diffuse small intestinal thickening with prominent muscularis layer and a focal area of severely thickened bowel with complete loss of layering. Findings are consistent with diffuse inflammatory disease +/- infiltrative disease and a focal bowel mass, which is highly concerning for underlying round cell neoplasia, less likely carcinoma or benign lesion.
- Large, mottled spleen with ill-defined hyperechoic nodules. 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. The hyperechoic nodules could be consistent with benign myelolipomas, but the appearance is not typical, and does not appear restricted to the regions around the vasculature.
- Moderate diffuse lymphadenopathy. The moderate mesenteric lymphadenopathy could be concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)), etc. A fine needle aspirate with cytology is recommended for further evaluation.

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

The previously noted abnormalities are still present and appear to have progressed. The lymph nodes visualized are large, hypoechoic and diffuse and the previous area of focal bowel thickening with loss of layering is persistently present but appears to have progressed. These changes are highly concerning for possible underlying round cell neoplasia, as the spleen is large and abnormal as well. Recommend a fine needle aspirate of the spleen, a mesenteric lymph node and the thickened area of small intestine. If a cytologic diagnosis cannot be obtained, recommend surgical biopsies.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





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.

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