

IMAGING PERFORMED BY

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**DATE PRESENTING CLINICAL SIGNS**

11/4/22 Chronic vomiting after eating - getting worse over last couple weeks and bringing up multiple hairballs over last few days.

**PATIENT**

Madison Whittie

Current Medications: Cerenia and SQ fluids - ate well and no vomiting for 1 day then started clavamox for UTI - started vomiting and stopped eating - having diarrhea and vomited another hairball.

Lab Results: WBC 22,300, high eos. and baso., chem - glucose 195, CL 113, TP 5.8, FPL normal 1.5, UA - bacteruria, 1+ protein, glucosuria, mucus, T4- 2.6,

**SPECIES**

Feline

Radiographs: Very gassy GIT- broken pattern.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

Spayed Female

**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**

3/3/13

The left kidney has a normal shape and size (4.03 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**

6.95 Pounds

The right kidney has a normal shape and size (4.25 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 0.35 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.

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

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.

**HOSPITAL NAME**

Hickory Vet Hospital

**Spleen**

The spleen is normal/borderline "plump" measuring 0.98 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.

**REFERRING VET**

Dr. Snyder

**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.

**INVOICE**

42562

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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 0.32 cm. Duodenum wall measures 0.41 cm. Visualized peristalsis appears appropriate. There is a focal area of small bowel with increased wall thickness and complete loss of layering. In this area, the bowel wall measures at 0.54 cm.

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 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***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a diffuse mesenteric lymphadenopathy with mesenteric lymph nodes measuring 0.96, 0.70, and 0.65 cm. The omentum appears diffusely hyperechoic.

## **PRIMARY FINDINGS**

- Borderline “plump” spleen – This could be normal for a larger cat, or could be seen with infiltrative disease. Consider a fine needle aspirate if necessary.
- Thickened small intestine with prominent muscularis layer – 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.
- Focal area of small intestine with severe thickening and loss of layering – Findings are concerning for a focal bowel mass. Consider round cell neoplasia, carcinoma, adenoma, other.
- Moderate mesenteric 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.

## **SECONDARY FINDINGS**

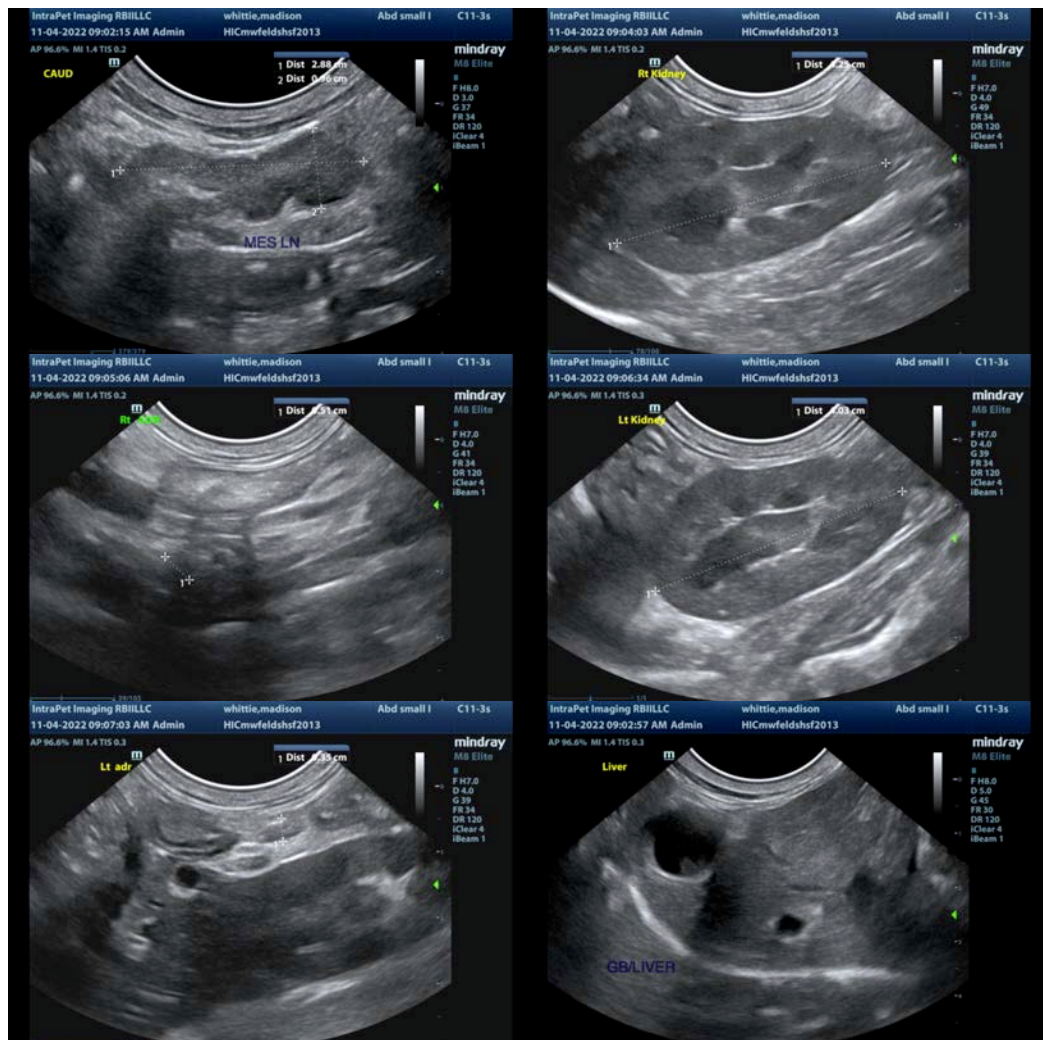
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting. Incidental gall bladder debris is less common in cats.

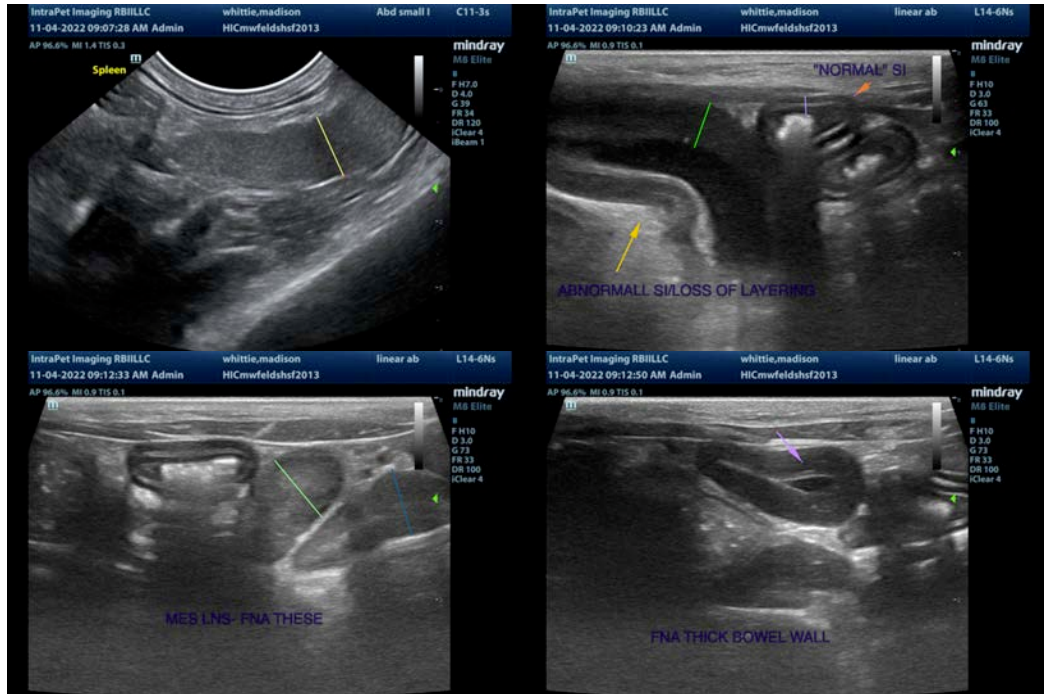
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The combination of the bowel loops with complete loss of layering and very prominent mesenteric lymph nodes is concerning for possible round cell neoplasia. Consider a fine needle aspirate of a mesenteric lymph node and the bowel wall. Additionally, you could consider sampling of the spleen if your other aspirates are not successful.

If a cytologic diagnosis cannot be obtained, consider surgical biopsies.

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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