

**DATE PRESENTING CLINICAL SIGNS**

5/4/23 Patient presented for 2+ weeks of intermittent vomiting, diarrhea, and decreased appetite. PE reveals repeatable pain on abdominal palpation and subjectively ropey feeling intestines, no other significant findings.

PATIENT

Ellie Hudson Current Medications: Metronidazole 500mg tablet 4/24/2023, FORTIFLORA CANINE BOX 4/24/2023, Cerenia 60mg Tablet 4/24/2023

SPECIES

Canine

Lab Results: Limited ultrasound - subjective thickening of small intestines, hypoechoic nodule ~1-2 cm diameter right mid abdomen. Chem17/CBC/Lytes - nsf. Fecal testing - negative for parasites
Date of Previous IntraPet Ultrasound: No previous.

BREED

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

Golden Retriever

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Intact 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

8/24/12

The left kidney has a normal shape and size (6.49 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

91 Pounds

The right kidney has a normal shape and size (6.29 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 0.88 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

Everhart VH

The right adrenal gland is normal in size measuring 1.0 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. Kerr

Spleen

The spleen is large in size. 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

47156

Liver

The liver is subjectively normal in size, and echogenicity 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 <0.7cm 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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.38 cm. Visualized peristalsis appears appropriate. There is a focal section of small intestine with thickened wall and complete loss of wall layering. In this region, the wall measures at 0.85 cm. Findings are most consistent with a focal bowel mass.

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 area of 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 significant/severe mesenteric lymphadenopathy at the mesenteric root with large hypoechoic rounded lymph nodes measuring 4.87 cm x 3.59 cm and 6.16 cm x 2.74 cm. The omentum is hyperechoic around the bowel mass and the large lymph nodes.

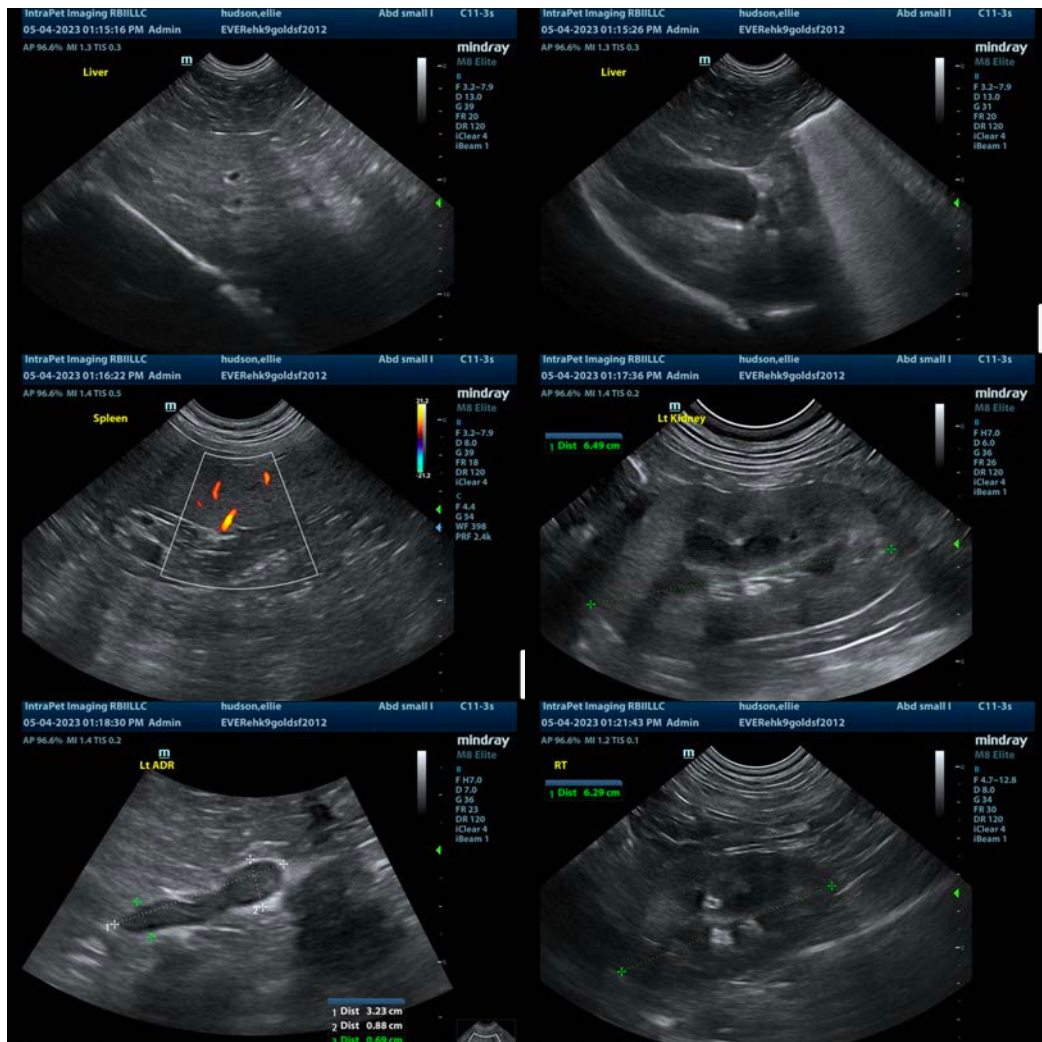
ULTRASONOGRAPHIC FINDINGS

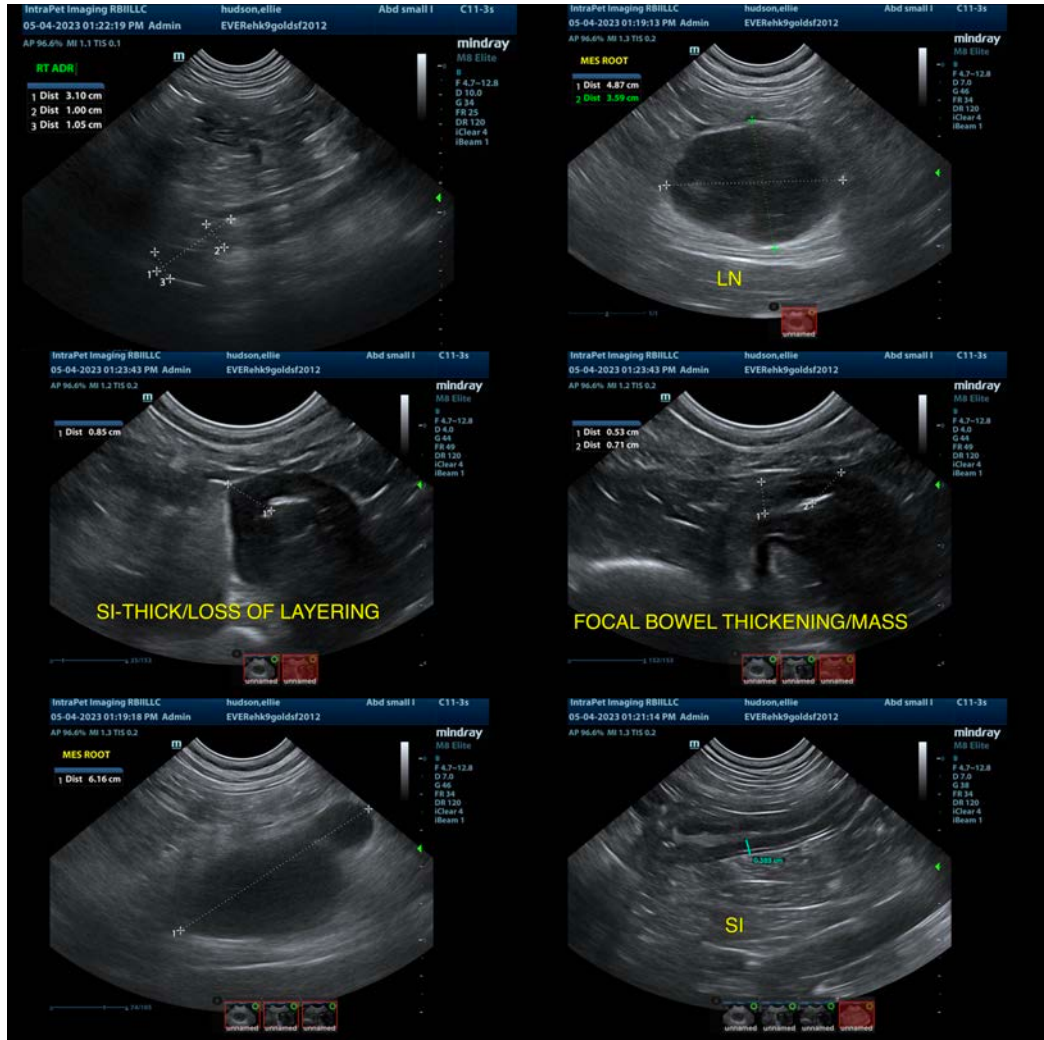
- Large, mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Heterogeneous liver – The 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.
- Focal section of small intestine with a thickened wall and complete loss of layering – Findings are concerning for infiltrative disease. Differentials include round cell neoplasia, carcinoma, adenoma, other.
- Severe mesenteric lymphadenopathy – The severe mesenteric lymphadenopathy is most 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 combination of the focal bowel thickening with loss of layering and the severely enlarged mesenteric lymph nodes is highly concerning for possible round cell neoplasia, although other differentials exist. Recommend a fine needle aspirate of a mesenteric lymph node +/- the abnormal bowel wall. If a cytologic diagnosis cannot be obtained based on these samples, you could consider an aspirate of the spleen and liver. If a diagnosis is still elusive, then surgical biopsies will likely be necessary.

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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