

**DATE PRESENTING CLINICAL SIGNS**

3/16/22 Vomit huge amount of blood about a month ago. On no meds, no dietary indiscretion, blood work and rads NAF. Since then intermittently normal with intermittent vomit and progressive anorexia. Mild weight loss. No further blood seen. Now diarrhea, with black tar stools.

PATIENT

Diesel Stull Current Medications: Sucralfate 1g TID, Omeprazole BID.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Hound X

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.

SEX

Neutered Male

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

AGE

1/1/02

The left kidney has a normal shape and size (8.16 cm). Overall echogenicity is slightly hyperechoic with poor 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

Neutered Male

The right kidney has a normal shape and size (7.44 cm). Overall echogenicity is slightly hyperechoic with poor 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 0.72 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 Brillhart RDMS

The right adrenal gland is normal in size measuring 0.70 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

Green Acres Pet
Center

Spleen

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There is a hypoechoic solid mass effect visualized on the spleen measuring 5.14 cm x 4.66 cm. This lesion deviates the splenic capsule.

REFERRING VET

Dr. Kaschenbach

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.

INVOICE

36235

The gallbladder 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 is mildly dilated with fluid and irregular shadowing material. There is a focal area of severe gastric wall thickening with complete loss of layering visualized measuring at least 1.5 cm x 4.9 cm. Some small areas of more normal appearing gastric wall are visible. There is no evidence of obstruction at the pyloric outflow tract, but this area is difficult to visualize.

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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a prominent gastric lymph node visualized measuring 0.62 cm. The omentum is generally of normal echogenicity.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

PRIMARY FINDINGS

- Severely thickened gastric wall with complete loss of layering – Possible differentials would include infiltrative neoplasia, an ulcer, or severe focal inflammation.
- Mottled spleen with hypoechoic mass effect – A focal, solid, mixed echogenic mass is present within the splenic parenchyma. This mass distorts the splenic capsule. Differentials include benign lesions such as lymphoid hyperplasia, hemangioma, etc., or neoplastic lesions such as hemangiosarcoma, lymphoma, histiocytic sarcoma, etc.
- 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.
- Prominent gastric lymph node – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

SECONDARY FINDINGS

- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

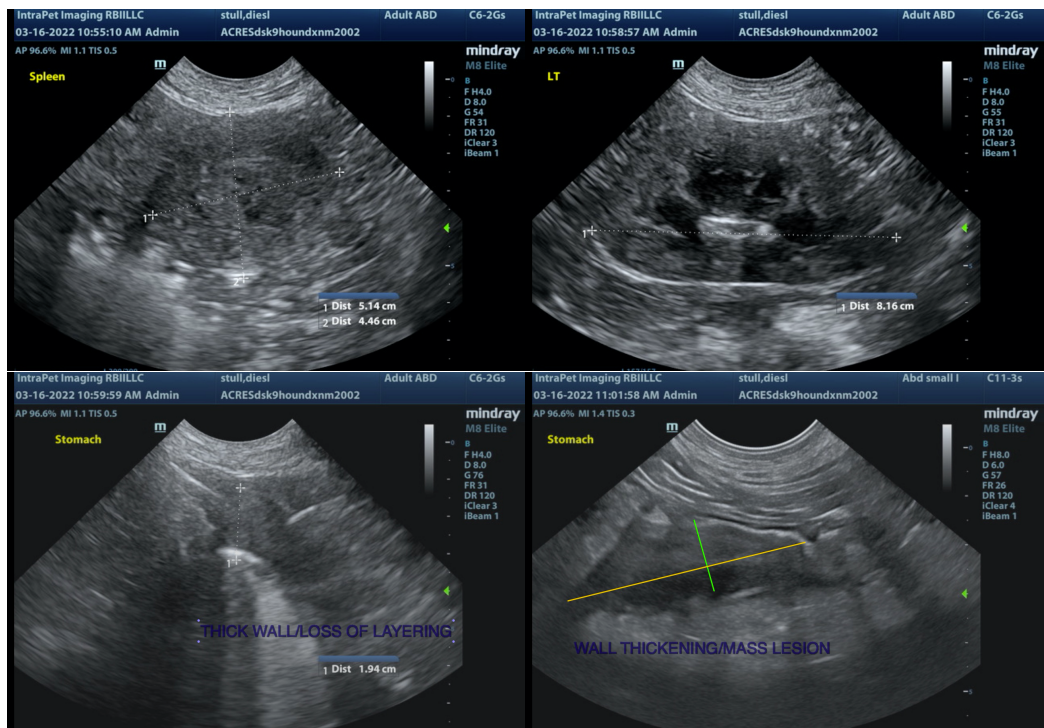
The gastric wall appears very thickened with a complete loss of layering. This is concerning for infiltrative disease such as a benign or cancerous neoplasm, although severe ulceration, edema, intramural hemorrhage, etc. can appear similar. Additionally, there is a splenic mass present.

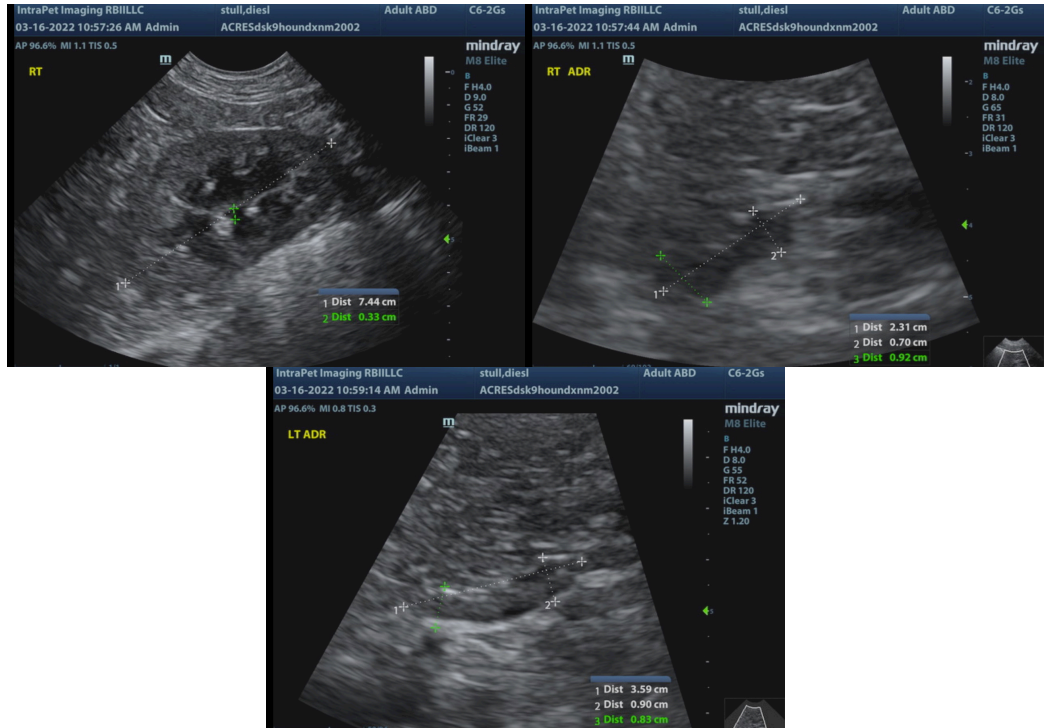
Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

Options to forward evaluate the gastric wall include:

- Fine needle aspirate - This lesion is right on the border of being too deep to sample, but this could be a possibility.
- Endoscopic biopsies - Given the hemorrhage reported, this could be a possibility, but there is the chance of missing the diagnosis if a deeper biopsy is required.
- Surgical biopsies - This would be ideal in that you could both evaluate the lesion for surgical removal and obtain samples. Unfortunately, this is the most invasive method. Splenectomy could be performed at the same time.
- Additionally, a CT scan of the abdomen could be considered to try and determine if the gastric lesion is resectable.

There is a mass on the spleen. Ideally, splenectomy would be performed for both therapeutic and diagnostic purposes. A fine needle aspirate could be considered.





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