

**DATE**

6/3/22

PRESENTING CLINICAL SIGNS

History: Chronic off and on vomiting, lethargy, decreased appetite. Had 1 episode recently of some blood in vomit and dark stool a few days later, but none since. Partially responds to medical management with bland diet, omeprazole, carafate, cerenia but has had a couple of repeated episodes.

PATIENT

Abbey Whitehead

Current Medications: Omeprazole 20mg SID x 10 days; carafate 1g BID x past week; cerenia 48mg PO PRN for vomiting. i/d low fat food

Lab Results: CBC/Chem 5/31/22: Creat=1.9, Chol=75; amylase=1964

5/26: snap CPL abnormal faint.

SPECIES

Canine

Radiographs: empty stomach, non-displaced. small bowel subjectively appears thickened and slight decrease of serosal detail.

BREED

Shepherd Mix

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SEX

Spayed Female

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

6/19/13

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.

WEIGHT

45 Pounds

The left kidney has a normal shape and size (5.27 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

The right kidney has a normal shape and size (5.49 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.

Adrenal Glands**HOSPITAL NAME**

Greenbrier VC

The left adrenal gland is normal/borderline "flat" in size measuring 0.32 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.

REFERRING VET

Dr. Streett

The right adrenal gland is normal/borderline "flat" in size measuring 0.35 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.

Spleen**INVOICE**

15873

The spleen is subjectively normal in size, 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.

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 is moderately dilated with fluid and irregular shadowing material most consistent with moderate ingesta and gas. 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 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 appears subjectively, moderately increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed. The duodenum measured 0.45 cm. The jejunum measured 0.39 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/region 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

There is no free fluid. There is no evidence of significant lymphadenopathy. The omentum in the caudal abdomen in the areas of the thickened bowel appears hyperechoic.

ULTRASONOGRAPHIC FINDINGS

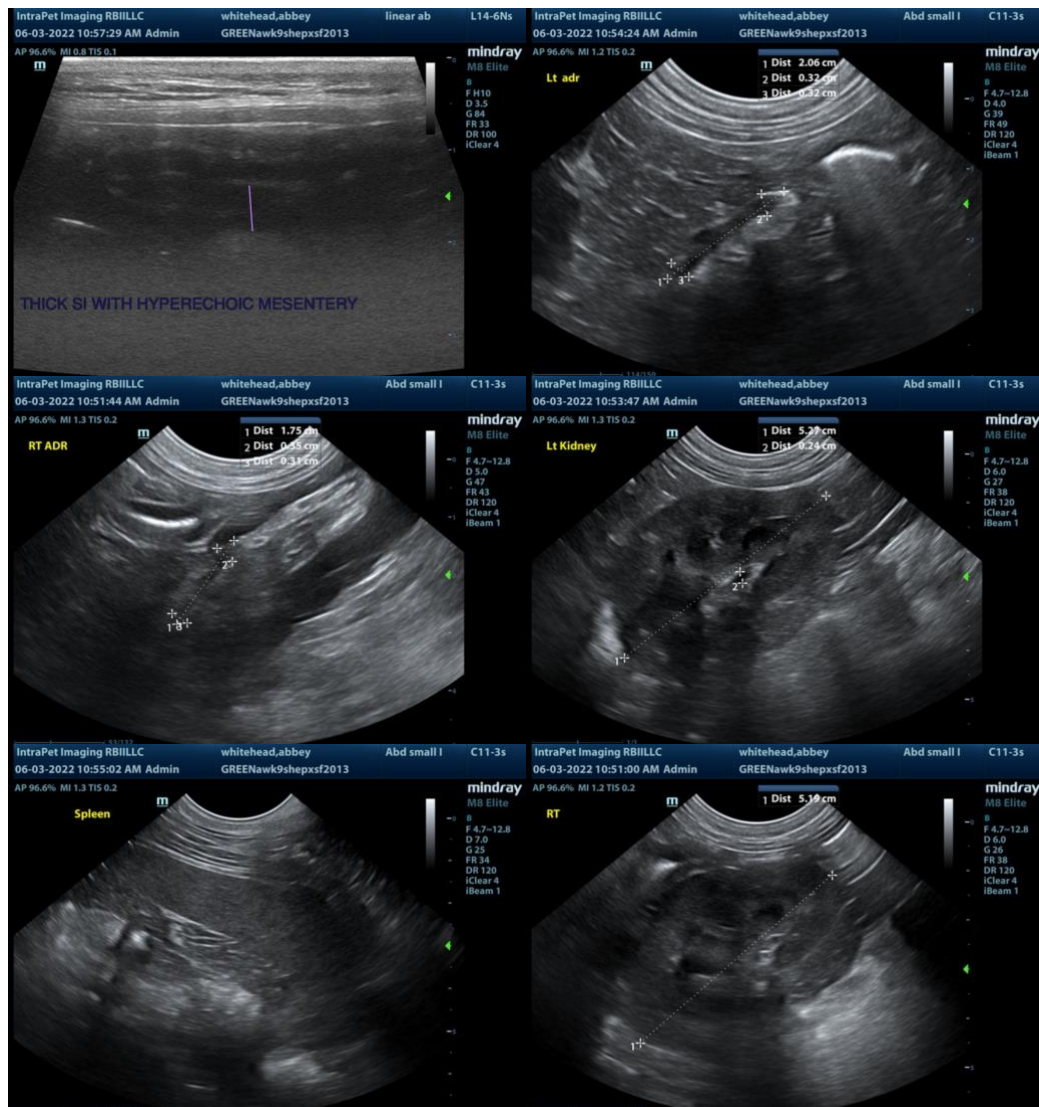
- Subjectively thickened small intestine with intact layering and surrounding hyperechoic mesentery. The moderate small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Shadowing material within the gastric lumen. There appears to be some shadowing in the gastric lumen, preventing clear visualization of the far wall. Correlate with feeding history and abdominal radiographs. There is no evidence of an obstruction.
- Borderline "flat" adrenals. I recommend screening for Addisons.

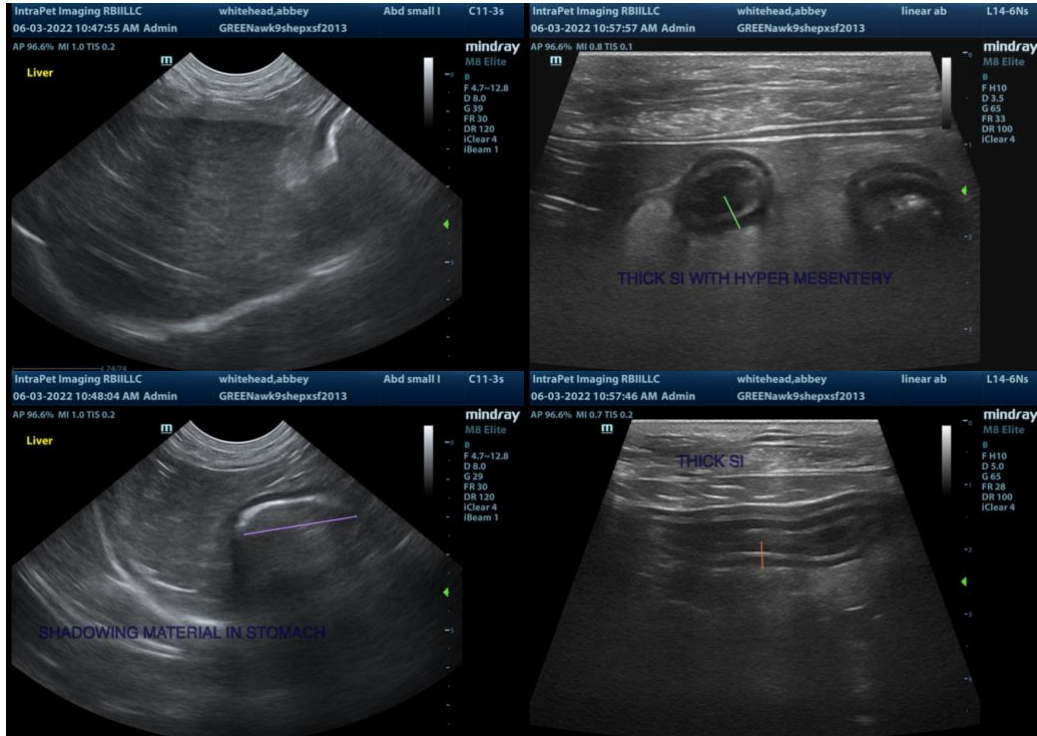
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The bowel in the caudal abdomen appears somewhat thickened with hyperechoic mesentery surrounding. Wall layering appears intact. This could be consistent with acute enteritis, but given the more chronic symptoms, differentials, such as food allergy/dietary intolerance, IBD, dysbiosis, GI parasitism, and less likely intestinal neoplasia need to be considered.

- I recommend a novel protein/hydrolyzed protein prescription diet
- I recommend a GI panel (to Texas A & M) for a quantitative PLI/TLI/Cobalamin/Folate to further evaluate the pancreas and small intestine.

- If symptoms persist, I would consider pursuing surgical biopsies, so as to sample the specific areas of small intestine which appear abnormal.
- Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.
- I recommend screening for Addisons disease, as both adrenal glands appeared somewhat "flat"





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.

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