



DATE PRESENTING CLINICAL SIGNS

1/29/26

Patient History: CC: slight weight loss, starting to become mildly pu/pd. History: very healthy. PE: NSF

PATIENT

Vivian Richetta

Current Medications: Denamarin once a day. Started once bloodwork came back on 12/23

Labwork Results: Labwork attached, reported as; Increased ALT, AST AND ALP, Mildly decreased albumin at 2.2

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.

SPECIES

Canine

BREED

Standard Poodle

SEX

Spayed Female

AGE

6/12/13

WEIGHT

37.5 lbs

INTERPRETED BY

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MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

HOSPITAL NAME

Harborside Mobile
Veterinary Clinic

REFERRING VET

Dr. Hawkins

INVOICE

72603

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 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (5.88 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.

The right kidney has a normal shape and size (4.91 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.71 cm at the cranial pole and 0.69 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.

The right adrenal gland is normal in size measuring 0.77 cm at the cranial pole and 0.75 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

The spleen is subjectively normal in size (2.23 cm in width at level of the hilus) and diffusely mottled. The blood flow through the hilus and splenic parenchyma appears normal. There are poorly defined hypoechoic nodules visualized throughout the parenchyma. Examples measure 0.78 cm and 1.04 cm.

Liver

The liver is large in size, and normal in echogenicity with rounded margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is an isoechoic/slightly hypoechoic poorly defined mass effect visualized in the left side of the liver measuring 3.18 cm x 2.52 cm.

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 contains a large amount of shadowing ingesta. 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. Shadowing ingesta interferes with full evaluation of the stomach and some areas of the cranial abdomen.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is increased. Bowel loops follow a typical curvilinear path. Duodenum wall measures 0.61 cm. Jejunum wall measures 0.41 cm. Visualized peristalsis appears appropriate. The small intestine is diffusely significantly thickened with evidence of mucosal fogging, striations, and speckling.

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 right limb of 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 no significant lymphadenopathy. The omentum is diffusely hyperechoic.

Other

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

ULTRASONOGRAPHIC FINDINGS

- Mottled spleen with numerous poorly defined hypoechoic nodules – There are several, non-cavitated, hypoechoic splenic nodules visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Large, heterogeneous liver with iso/slightly hypoechoic small mass effect/large nodule on the left side – 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. The lesion visualized has a somewhat benign appearance possibly consistent with a primary hepatic mass lesion/adenoma/carcinoma. Other differentials are possible.
- 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 but seems unlikely to be causing a current issue. Recommend continued monitoring.

- Large fluid/shadowing ingesta visualized within the gastric lumen – Correlate with feeding history. If the patient was adequately fasted, then consider such differentials as delayed gastric emptying. No evidence of an outflow tract obstruction is visualized.
- Diffusely thickened small intestine with significant mucosal fogging, speckling, and striations – Findings are most consistent with inflammatory intestinal disease, edema, and possible lymphangiectasia. A neoplastic process is less likely but cannot be ruled out.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver is large and heterogeneous with a poorly defined hypo- to isoechoic mass effect. The significance of these changes is uncertain. Recommend a liver function test (pre- and post-prandial bile acids) to further assess, and if a safe window for sampling is available, consider a fine needle aspirate of the mass lesion described. It is possible that a biopsy of the liver may eventually be warranted (histopathology, culture and copper levels).

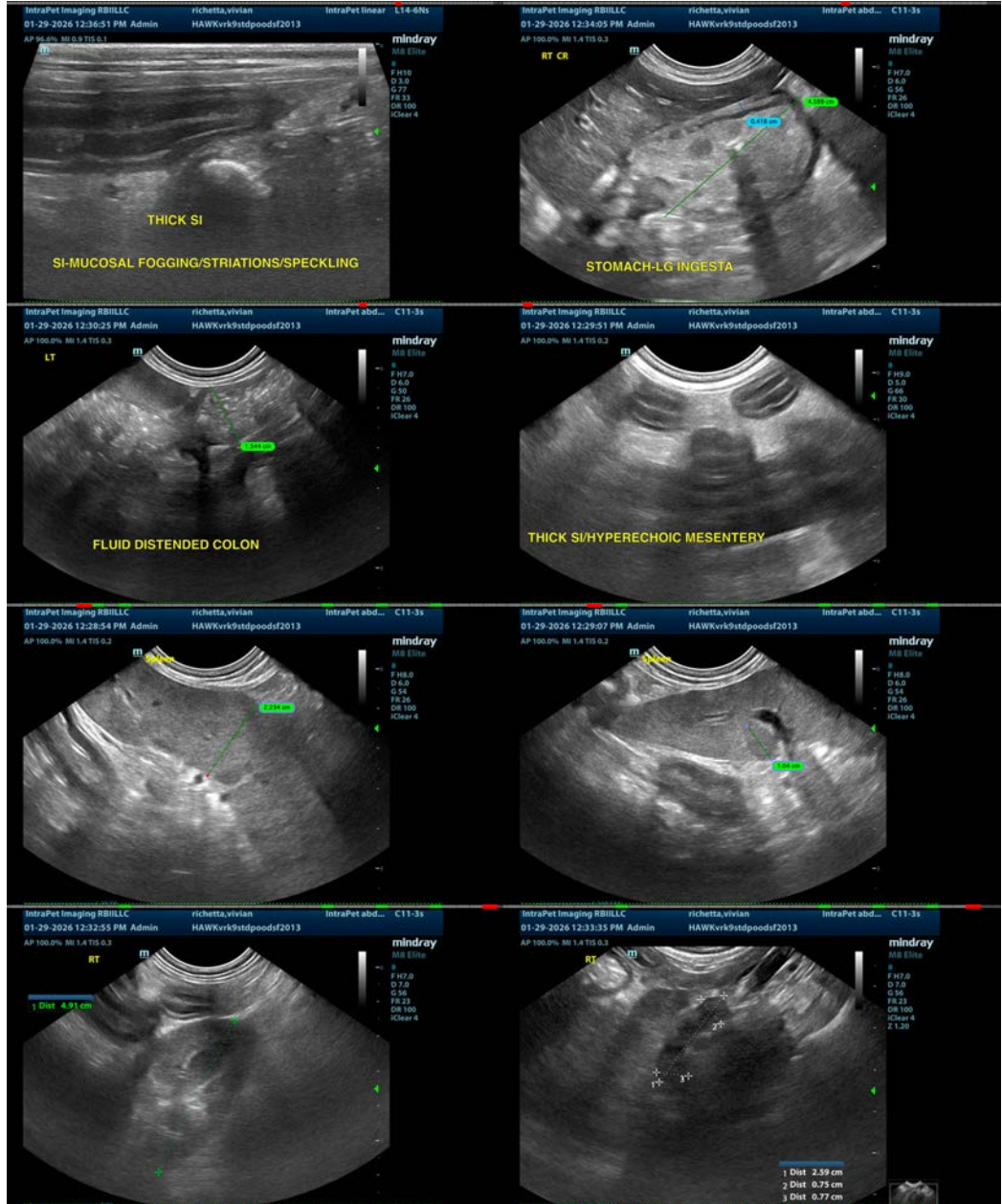
The small intestine is diffusely thickened with evidence of mucosal fogging and speckling. There is significant inflammation surrounding the small intestine. I suspect the small intestine is the primary lesion causing symptoms and the low albumin levels reported, although liver dysfunction could be contributing. Consider the following:

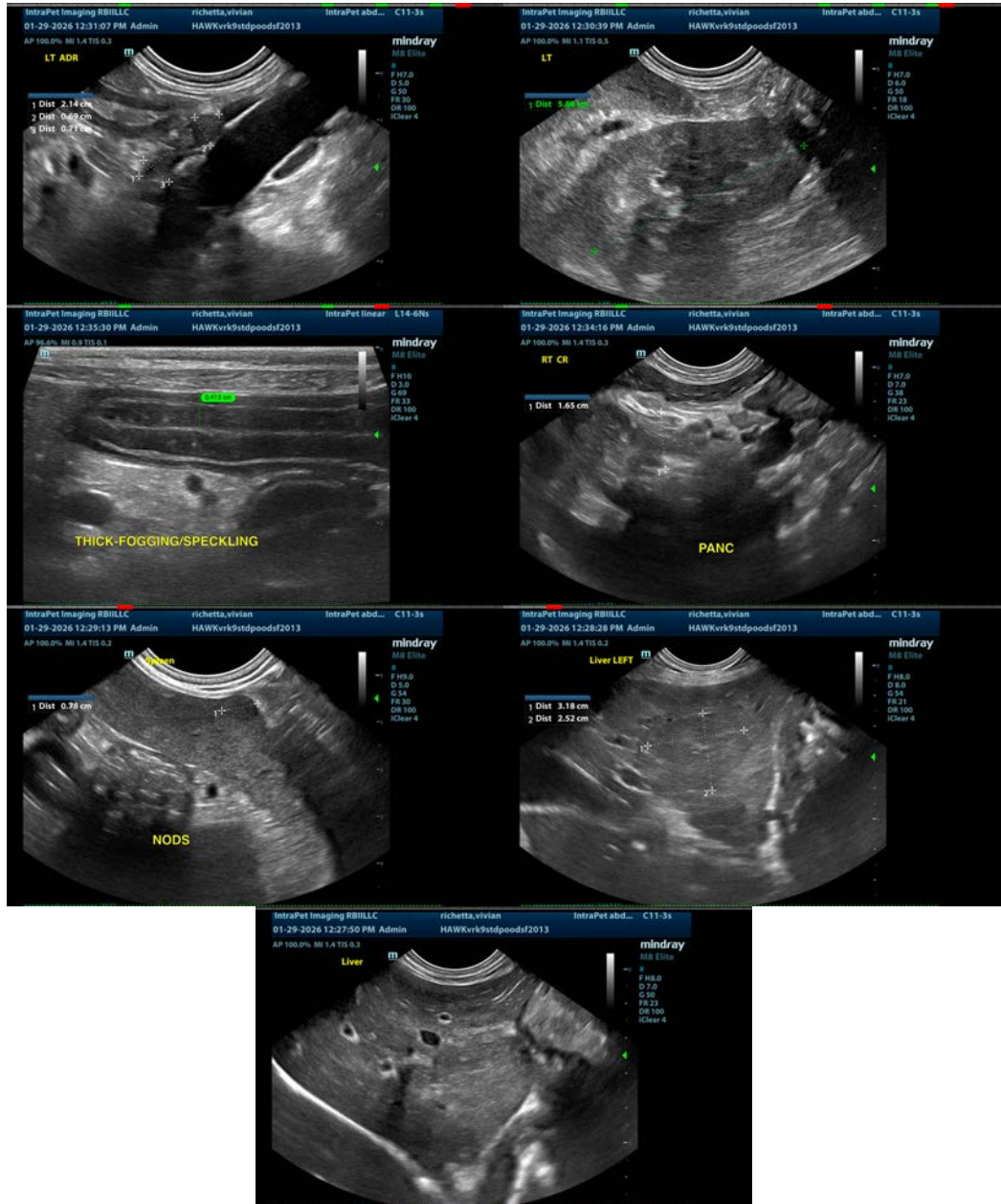
- Recommend a prescription ultra low-fat/combination hydrolyzed protein prescription diet (Royal Canin has one).
- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.
- Recommend chronic probiotic therapy.

The most common causes of a protein losing enteropathy are severe IBD +/- lymphangiectasia. Round cell neoplasia is a less likely possibility. Biopsies of the GI tract are necessary to further differentiate. If the patient is stable enough and liver function is normal, consider endoscopic biopsies of the GI tract. If the patient is not stable enough for anesthesia, then you may consider adding in an anti-inflammatory dose of steroids (0.5 mg/kg per day) to stabilize until biopsies can be acquired.

The spleen is mottled with ill-defined hypoechoic nodules. The nature of these nodules is uncertain. This could represent a benign or neoplastic process. Consider a fine needle aspirate (provided coagulation parameters are normal).

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement (disregard if this has already been done).





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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