

**DATE PRESENTING CLINICAL SIGNS**

6/27/23 Acute weight loss.

PATIENT Current Medications: Amoxicillin/Clavulanate 250mg 1 BID started Tuesday 6/20.

Leia Bayne Lab Results: Elevated Total Bilirubin. See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES Imaging Performed By: Rachel Brillhart, RDMS.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED** *Urinary System*

Beagle

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

Spayed Female

The left kidney has a normal shape and size (4.93 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.

AGE

3/1/12

The right kidney has a normal shape and size (4.88 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.

WEIGHT

30.3 Pounds

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal in size measuring 0.68 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

Happier at Home
Mobile Vet

The right adrenal gland is normal in size measuring 0.65 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***REFERRING VET**

Dr. Haskin

The spleen is normal in size but slightly irregular in shape. The blood flow through the hilus and splenic parenchyma appears normal. There is a small, somewhat subtle, mixed echogenic nodule visualized towards the periphery of the spleen, which mildly deviates the splenic capsule, measuring 2.26 cm x 0.95 cm.

*Liver***INVOICE**

43486

The liver is large in size, and normal in 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 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. The shadowing material visualized within the gastric lumen could be consistent with a recent atypical meal, ingested foreign material, etc.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with mild to moderate fluid distension with some echogenic material having the consistency of chyme/ingesta. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Duodenum wall measures 0.48 cm. Jejunum wall measures 0.34 cm. There is mucosal speckling observed. 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Poorly defined mixed echogenic peripheral splenic nodule/mass – There is a non-cavitated, mixed echogenic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Large, 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.
- Large, shadowing material visualized within the gastric lumen – This could be consistent with recent meal, ingested foreign material (grass, dirt, etc.), or even fabric, etc.
- Fluid/chyme dilated small intestine with mild wall thickening and occasional mucosal speckling – Findings could be consistent with a recent meal, generalized ileus, or ingested foreign material. Additionally, the bowel appears slightly thickened. This could be associated with mild inflammation, less likely infiltrative disease. Bright mucosal speckling has been postulated to represent dilated lacteals or focal accumulations of mucus, cellular debris, etc.. in the mucosal crypts.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A large mass effect, definitive obstruction, etc. is not visualized on today's exam, but there is a large amount of shadowing material within the gastric lumen. The nature of this material is unclear. This can be seen with a large amount of ingested dog food, debris (grass, etc.), or even ingested foreign material, etc. Additionally, the small bowel has echogenic fluid/material passing through. Correlate these findings with abdominal radiographs and feeding history. If the patient is adequately fasted, consider serial imaging (radiographs +/- ultrasound) to see if this material passes.

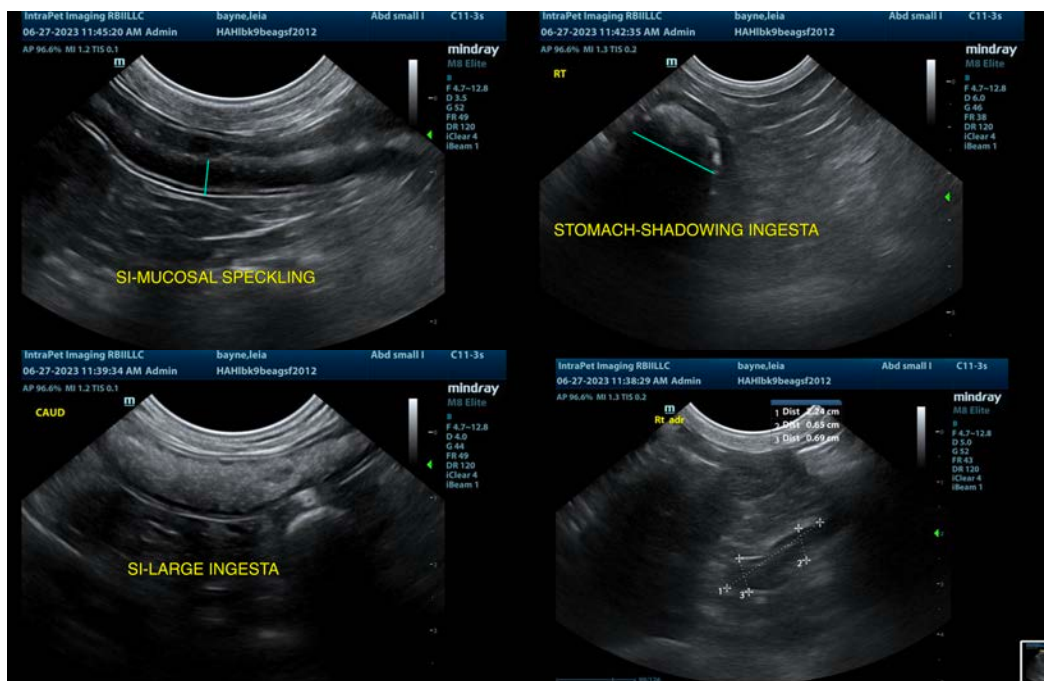
Subjectively, the small bowel appears somewhat thickened and there is some evidence of mucosal speckling. This can be seen with a primary enteropathy. It is unclear if this patient has GI signs in addition to the weight loss reported. If so, additional diagnostics could be considered.

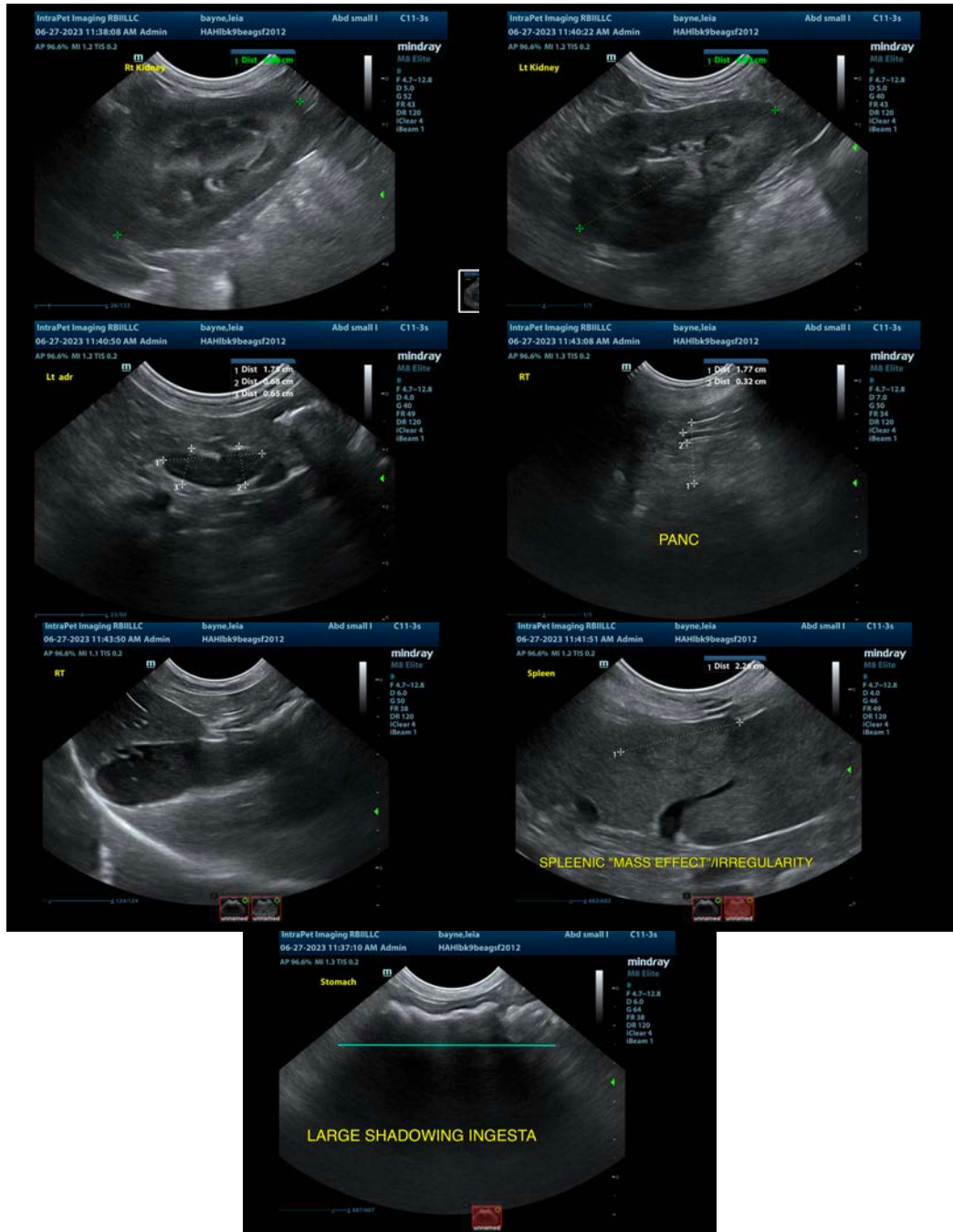
- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Consider chronic probiotic therapy.

If primary GI disease is thought very likely and symptoms are persistent, biopsies of the GI tract may be necessary.

There is a mixed echogenic, somewhat subtle irregularity/nodule associated with the spleen. Consider a fine needle aspirate of this lesion or close monitoring with ultrasound.

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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