

**DATE PRESENTING CLINICAL SIGNS**

1/3/23

Presented 12/30/22 for several days of lethargy and decreased appetite and 1 episode of tenesmus. PE: mm: pale pink and moist; CRT < 2 sec, multiple subcutaneous masses and pain left hip extension, otherwise unremarkable.

PATIENT

Abbey Fitzpatrick

Current Medications: Gabapentin 300mg 1 PO TID 12/30-current
Lab Results: 12/30/22: CBC: RBC (L) 3.18, HCT (L) 20.2, HGB (L) 6.6, nonregenerative. Chem 17: ALKP (H) 447. T4: 1.2

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

BREED

Labrador X

Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

AGE

1/1/11

The left kidney has a normal shape and size (7.13 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

57.5 Pounds

The right kidney has a normal shape and size (6.97 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 0.92 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

Perry Hall AH

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.

REFERRING VET

Dr. Baer

Spleen

The spleen is large, slightly irregular, and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There are at least two small hypoechoic nodules visualized in the parenchyma, one measuring 0.48 cm x 0.66 cm. Another measures 0.83 cm x 0.50 cm. Additionally, there are some mild capsule irregularities and irregular hypoechoic regions, one of which measures approximately 1.08 cm x 0.75 cm, and subjectively might have mildly reduced blood flow, consistent with previous infarct(?).

INVOICE

43860

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 gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild amount of non-organized echogenic debris. 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 normal 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 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. Duodenum wall measures 0.39 cm. Jejunum wall measures 0.36 cm. 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 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, 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.

Other

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

PRIMARY FINDINGS

- Echogenic debris visualized in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus. Cystocentesis was performed in the last set of images.
- Mildly mottled, slightly irregular spleen with small, hypoechoic nodules and some irregular hypoechoic regions – 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. The irregular hypoechoic regions could be consistent with infiltrative disease, previous infarcts, hyperplasia, etc.
- 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.

SECONDARY FINDINGS

- Mild 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.
- Moderate ingesta visualized in the gastric lumen – This is most consistent with a non-fasted patient

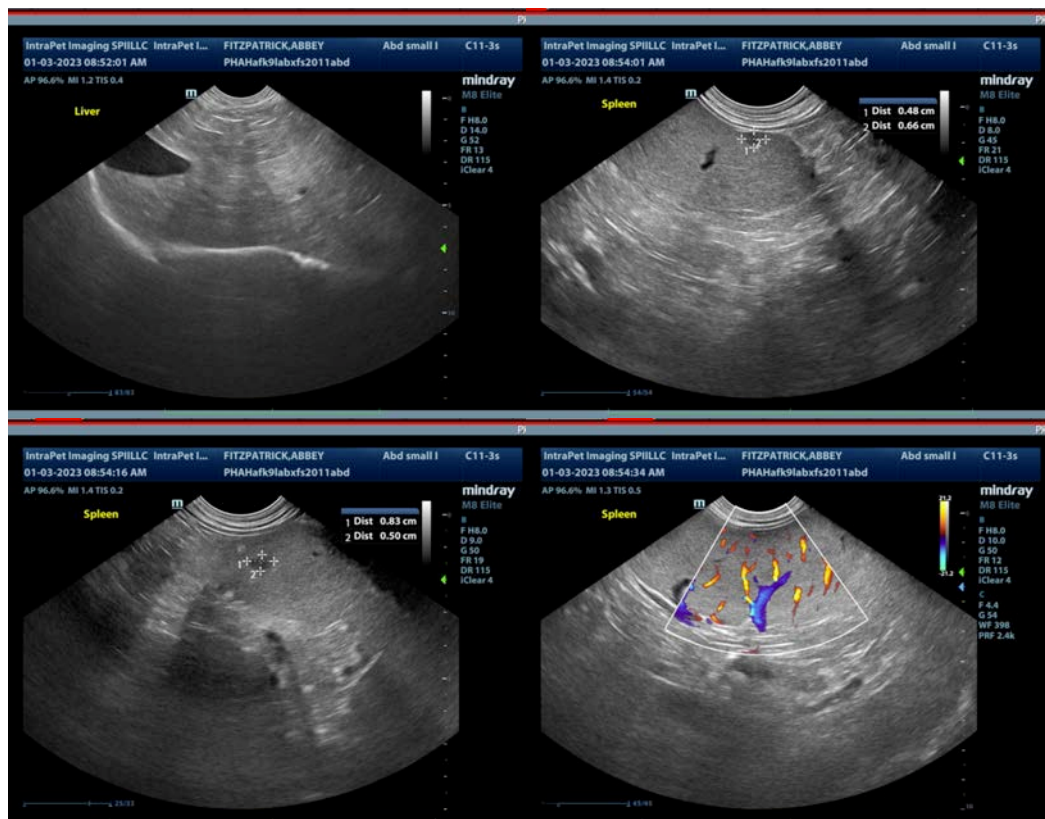
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

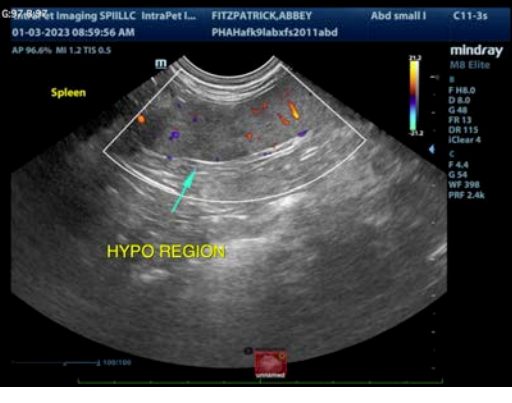
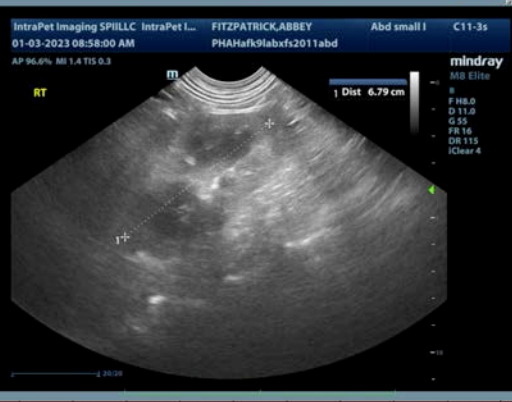
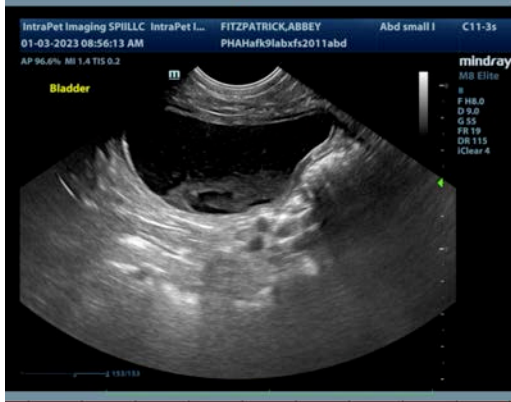
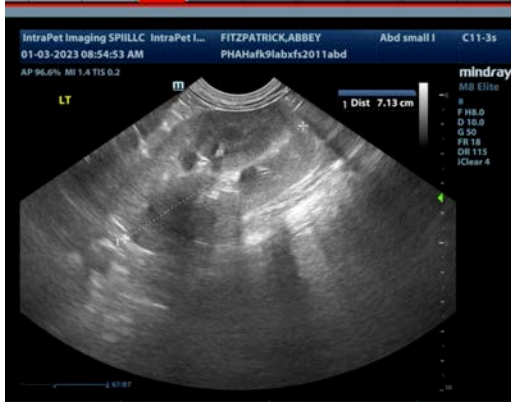
An obvious source for the anemia reported is not visualized. The spleen has some small hypoechoic nodules and some irregular hypoechoic regions. These could represent benign or neoplastic lesions. Recommend fine needle aspirate for further evaluation.

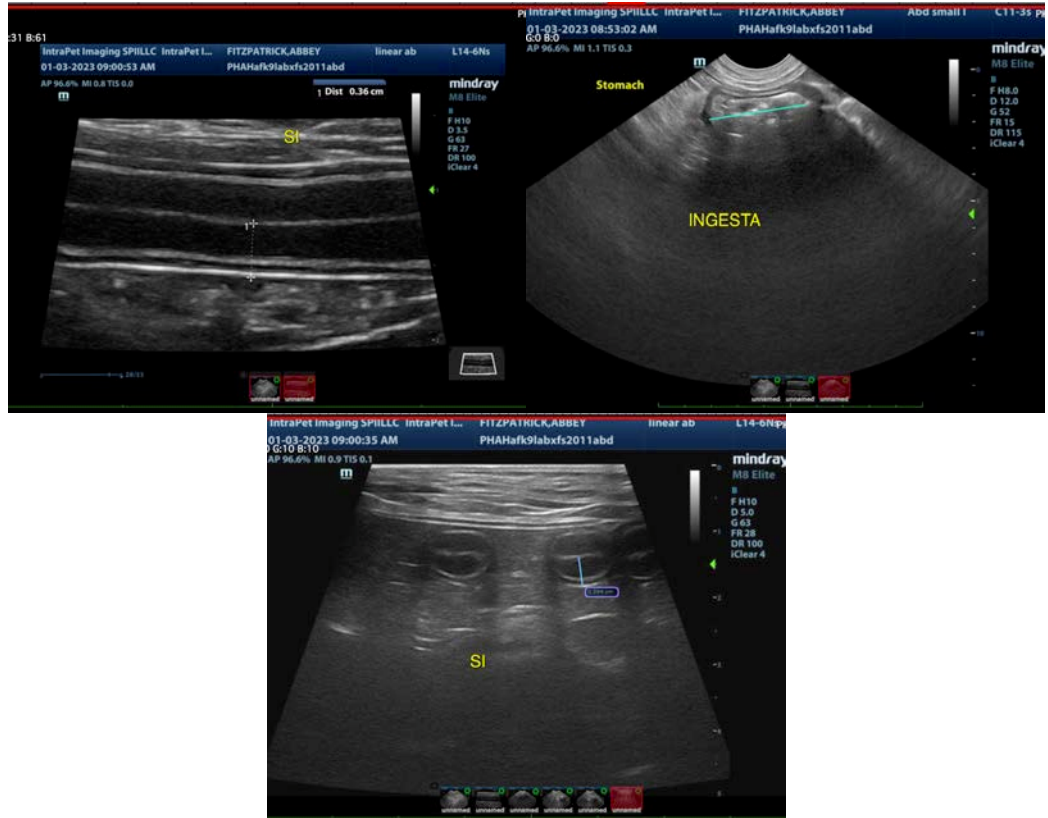
Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

The liver is mildly mottled. This is a non-specific finding. If liver enzyme values continue to rise, a liver function test and a fine needle aspirate could be considered.

Based on the non-regenerative anemia reported, consider a pathologist review of a blood smear, looking for atypical cells, blood parasites, etc. If a non-regenerative anemia is confirmed, consider rectal exam for evaluation for melena, a bone marrow aspirate, and possible vector borne disease testing (consider a canine comprehensive panel to NC State's vector borne disease lab).







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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