

**DATE PRESENTING CLINICAL SIGNS**

9.28.2022

Pet presented on 8/25/22 with the following history: 50% weight loss over the past 9 months. Ravenous, vomiting 1-2/week chronically. 2+ months of tan, soft, *very* malodorous soft stool. 1-year history of worsening frequency of asthma attacks. On PE pet was BAR and underweight with an ideal BW of around 11lbs. A grade 3/6 systolic murmur was appreciated. Flatulence noted during exam. On abdominal palpation very ropey and thickened intestines; no overt masses, no ascites, non-painful on palpation

PATIENT

Lucky Zernechel

SPECIES

Feline

Current Medications: None.

Lab Results: 8/25/22: CBC: normal; chemistry: cholesterol: 72mg/dL (91-305); Lipase: 128U/L (0-45); UA normal. Pet due to come in for a fasting GI panel on 9/26.

Date of Previous IntraPet Ultrasound: No previous.

BREED

DSH

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder** is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A scant amount of suspended, echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

AGE

8/7/2008

WEIGHT

8.44 lbs

The **left kidney** is normal size (4.38 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

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The **right kidney** is normal size (4.34 cm in length); with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

HOSPITAL NAME

Westminster
Veterinary Hospital

Adrenal Glands

The **left adrenal gland** is normal size (0.44 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is normal size (0.42 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Hall

Spleen

The **spleen** is subjectively normal in size (0.78 cm in width at the level of the hilus). A 0.68 cm hyperechoic nodule is observed at the cranio-lateral aspect. The lesion causes slight capsular expansion. The remaining parenchyma is mottled, bordering on a "moth-eaten" appearance. The remaining peripheral margins are curvilinear. Splenic vasculature is normal with no evidence of thrombosis.

INVOICE

11729

Liver

The **liver** is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal.

Gastrointestinal

The **gastric lumen** is minimally distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal to mildly thickened (up to 0.28 cm) with retention of the normal layering pattern. There is disruption in the normal 1:3 muscularis: mucosal ratio in most segments. There is also mucosal speckling and thickening of the submucosal layer in some regions. A line of mucosal fibrosis is also seen. Discreet masses are not identified. The ileocecolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

Pancreas

The left limb is visualized and is normal in size with normal curvilinear peripheral contours. The parenchyma is slightly hypoechoic relative to surrounding omental fat. No focal lesions are observed. The pancreatic duct is visible but not overtly dilated (0.18 cm in diameter).

Free Abdomen

Trace free fluid is observed. A cluster of enlarged, heterogenous, slightly cystic **lymph nodes** are observed at the mesenteric root, the largest measuring 2.92 cm in length. Surrounding mesentery is hyperechoic.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The mesenteric lymphadenopathy could be consistent with infiltrative neoplasia (i.e., lymphoma), lymphadenopathy, or reactive hyperplasia.
- The diffuse splenic parenchymal changes are also concerning for infiltrative neoplasia (i.e., lymphoma). However, a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, or similar) cannot be excluded. The hyperechoic splenic nodule trends toward the benign (i.e., myelolipoma).
- Bowel pattern consistent with inflammatory bowel disease with some potential for emerging lymphoma.
- Trace ascites, likely secondary to bowel and/or lymph node pathology

Secondary Findings

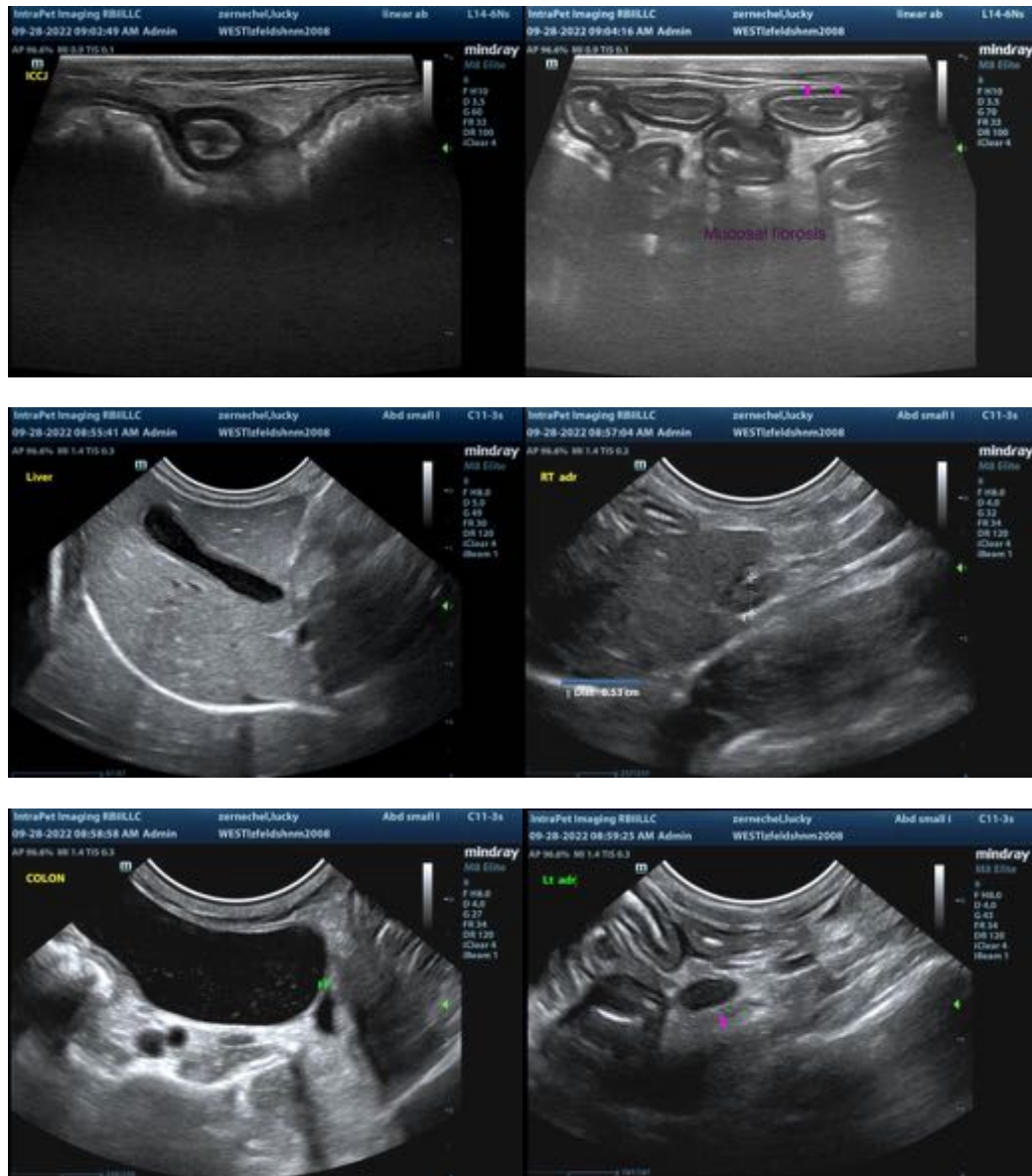
- Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.
- The pancreatic changes may be a normal variant for this patient or could be consistent with mild, chronic pancreatitis. Correlation with clinical findings is recommended.
- Bilateral degenerative renal changes with dystrophic mineralization

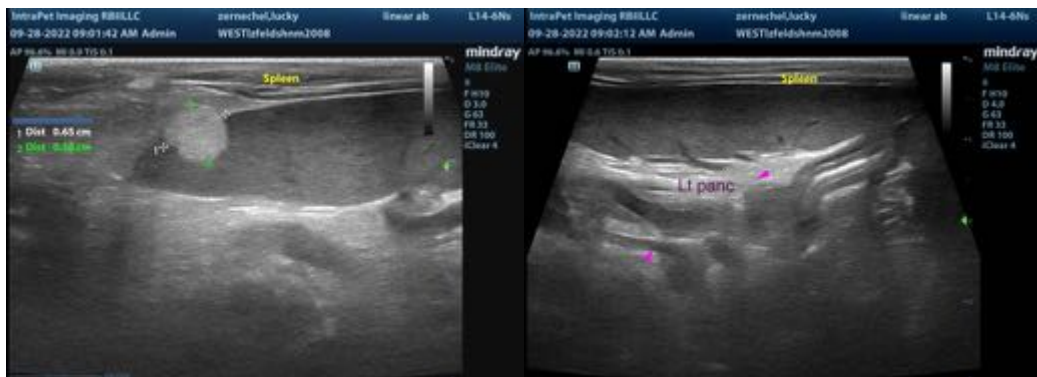
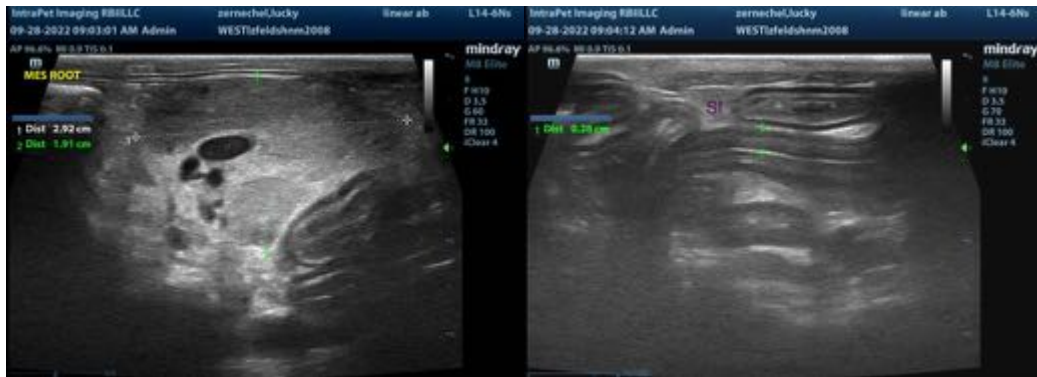
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess cardiopulmonary status and to assess for lymphadenopathy.

Fine-needle aspiration of the spleen, mesenteric lymph nodes, +/- liver, should be considered if clotting status is appropriate. Twenty-five gauge-needles should be used. If results are inconclusive, additional testing (i.e., biopsies) may be warranted.

A malabsorption panel including serum cobalamin and folate, TLI and PLI, is also recommended, given the bowel changes.





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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