

**DATE PRESENTING CLINICAL SIGNS**

1/19/22

History: Weight loss and diarrhea. Owner has noticed both over the last 3 weeks. Weight is down approximately 2 lbs since August. Still has a good appetite. May be drinking more water than normal. Lab work was unremarkable, though may have very early CKD.

PATIENT

Jack Black Kavanaugh

Current Medications: Metronidazole 50 mg BID x 5 days
 Lab Results: Trace protein, USG 1.032, BUN 33, creat 1.3. Remainder of lab work including T4 were normal.
 Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

7/30/08

WEIGHT

9.18 Pounds

INTERPRETED BY

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 MS, Diplomate ACVIM
 (Small Animal Internal
 Medicine)

IMAGING PERFORMED BY

Stephanie Pearce
 RDCS, RVT

HOSPITAL NAME

Stevenson Village VH

REFERRING VET

Dr. Vinson

INVOICE

34380

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 (3.98 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.

The right kidney has a normal shape and size (4.14 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

The left adrenal gland is normal in size measuring 0.37 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 0.39 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 normal/borderline plump 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. There is an ill-defined, focal hyperechoic region/lesion in the hepatic parenchyma measuring approximately 1.51 cm x 1.79 cm, visualized in the mid region of the liver, under the sternum. This lesion does not appear expansile and does not deviate the hepatic margins.

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 minimal luminal contents. It measures at a normal thickness of <0.36cm 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. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.31 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction is visualized. The wall layering in this area appears intact with normal thickness. The proximal colon and all of the colon visualized appears significantly fluid distended.

Pancreas

The pancreas is prominent and hypoechoic as 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. Pancreatic duct measures 0.32 cm.

Free Abdomen

Scant anechoic free fluid is present. There are occasional clusters of prominent mesenteric lymph nodes. There is one medial to the spleen measuring 0.4 cm. Others measure 0.38, 0.35 cm. The omentum is generally of normal echogenicity.

PRIMARY FINDINGS

- Focal, hyperechoic lesion in the liver – The significance of this lesion is unknown. In general, hyperechoic lesions are less concerning, but an underlying neoplastic lesion cannot be excluded as a possibility. Consider fine needle aspirate and continued monitoring with ultrasound.
- Hypoechoic, prominent pancreas with prominent pancreatic duct – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Prominent muscularis layer to the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

SECONDARY FINDINGS

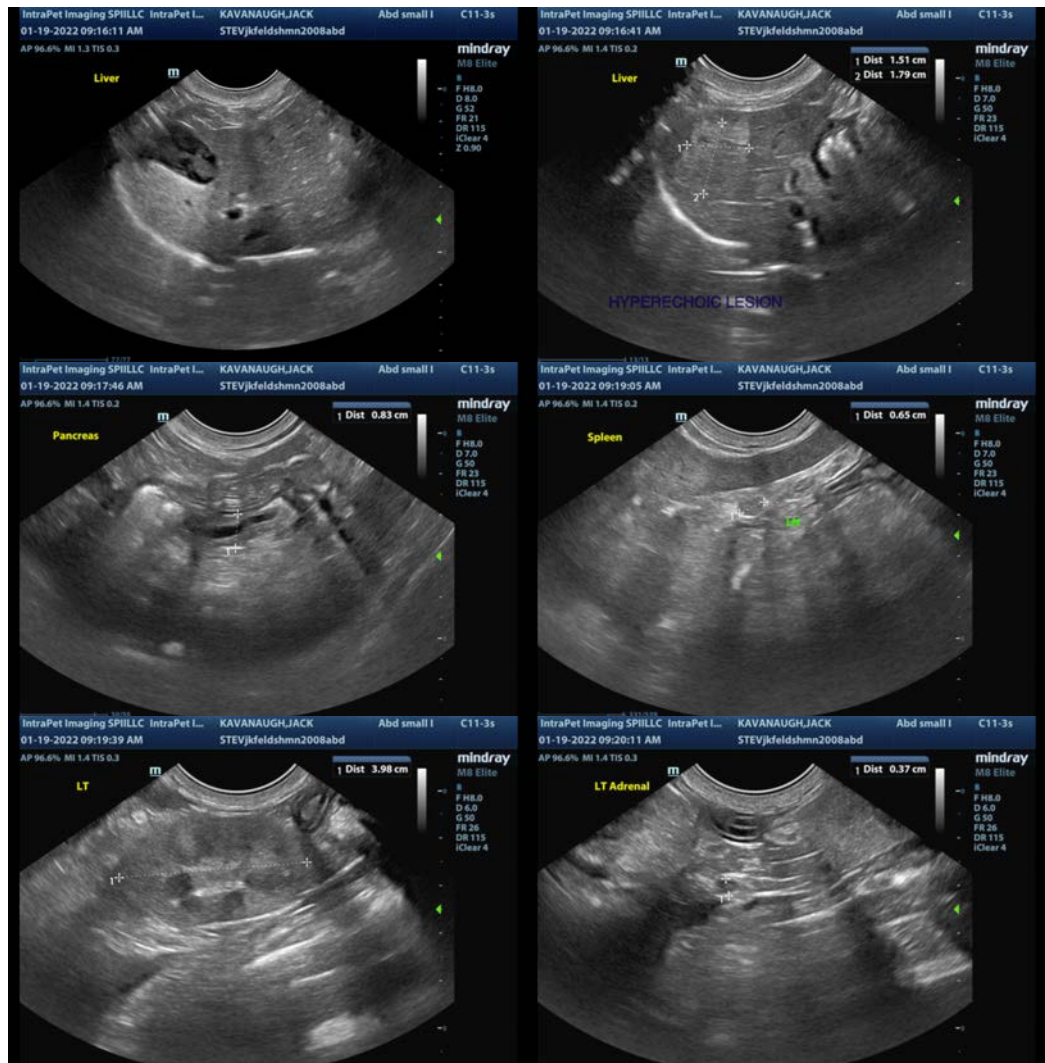
- Borderline plump spleen – The significance of this is unclear, as the parenchyma appears relatively normal. A fine needle aspirate could be considered.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting. Incidental gall bladder debris is less common in cats.
- Fluid distention of the large intestine – Findings are consistent with the diarrhea reported.

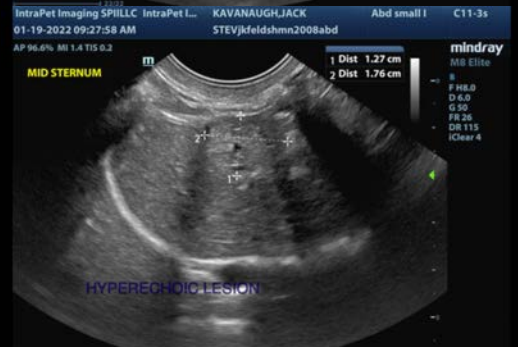
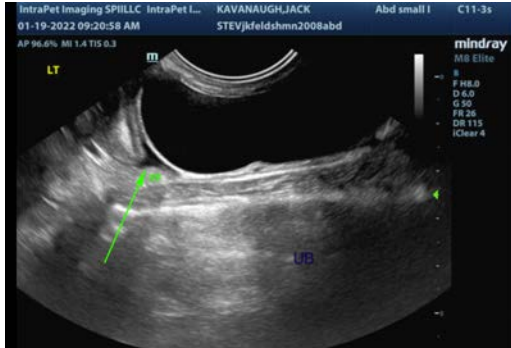
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The lesions observed involving the large and small intestine are somewhat non-specific. No focal lesions are observed, and there is no loss of layering, mass effects, etc. Consider such differentials as IBD, food allergy, intestinal dysbiosis, chronic pancreatitis, exocrine pancreatic insufficiency, GI parasites, etc.

- Recommend a hydrolyzed protein/novel protein diet.
- Recommend probiotic therapy.
- Recommend a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate for pancreatic and small intestinal disease.
- If weight loss and GI signs persist, consider obtaining biopsies of the GI tract and mesenteric lymph nodes.

The significance of the lesion observed in the liver is unclear. This could represent an area of benign remodeling, or could be an early hepatic mass. Consider a fine needle aspirate or monitoring with abdominal ultrasound. Additionally, recommend 3-view thoracic radiographs.





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.

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