IMAGING PERFORMED BY

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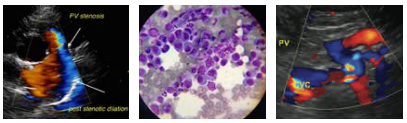

SonoPath
Clinical Sonography & Telecytology
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DATE
12/23/21

PATIENT
Finn Davis

SPECIES
Canine

BREED
Mix

SEX
Neutered male

AGE
6/25/19

WEIGHT
69.2 lbs

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

IMAGING PERFORMED BY
Rachel Brilhart RDMS

HOSPITAL NAME
Eastern AH

REFERRING VET
Dr. Frere

INVOICE
94879

PRESENTING CLINICAL SIGNS

History: Chronic diarrhea. Patient is otherwise healthy and only abnormality on PE is soft stool on rectal.
Lab Results: Negative IPS. Other labs pending.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: IV sedative.
Stat Report: Not requested.

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 visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (6.71 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 (7.03 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 0.56 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 0.73 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, 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 large in size and hypoechoic 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 gallbladder 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 <0.7cm 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. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased (the duodenum measures 0.33 cm and the jejunum measures 0.29 cm). Bowel loops follow a typical curvilinear path with distinct wall layering. 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. The colonic wall measures 0.32 cm.

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. There is a significant mesenteric lymph node present. Mesenteric lymphadenopathy was present with a cluster of large, mesenteric lymph nodes at the root of the mesentery measuring 1.19 x 3.8 cm, 0.58 cm and a prominent gastric lymph node that measures 0.93 x 0.61 cm. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Moderate mesenteric lymphadenopathy. Differentials include inflammation, infection or neoplasia.

- Large, heterogenous and hypoechoic 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. The primary differentials for a hypoechoic liver would be inflammatory and infiltrative disease (lymphoma).

- Mild small intestinal wall thickening. The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

SECONDARY FINDINGS:

- Moderate gallbladder sludge. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a significant lymphadenopathy present in the caudal abdomen towards the route of the mesentery. Large, mesenteric lymph nodes can be seen in young dogs, but this seems more prominent than usual. Consider a FNA.

Additionally the liver is hypoechoic and heterogenous. If the liver values are elevated then I recommend a

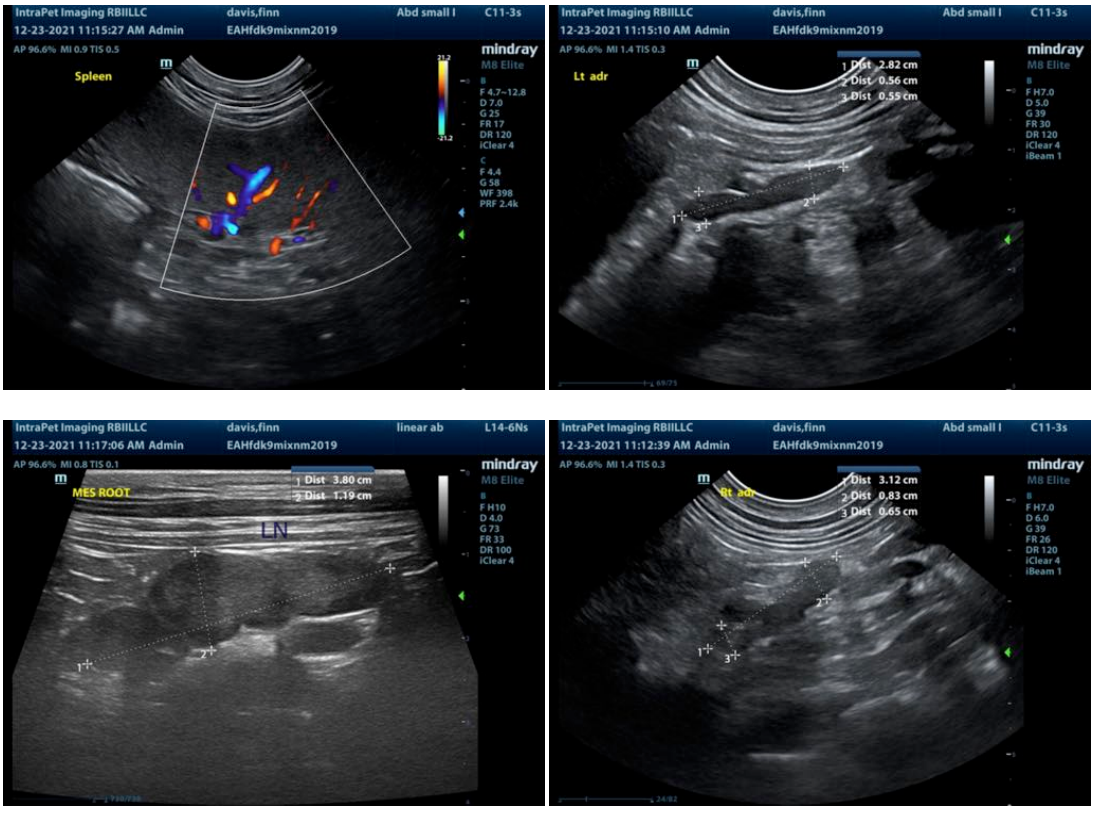
FNA of the liver. If the liver values are normal consider continued monitoring.

The small bowel is subjectively thickened, which correlates with the diarrhea reported in the history. Consider the following:

- Recommend evaluation for possible systemic cause of diarrhea including screening for Addison's disease, liver function testing if appropriate and a GI panel to Texas A&M with a qualitative PLI, TLI, cobalamin and folate to look for evidence of exocrine pancreatic insufficiency, cobalamin deficiency, dysbiosis, etc.

If metabolic causes are thought unlikely then consider primary GI causes such as GI parasitism, mild pancreatitis, bacterial dysbiosis, food allergy, IBD and less likely intestinal neoplasia.

- Recommend FNA of the mesenteric lymph nodes and careful palpation of external lymph nodes for any enlargement.
- Consider screening for GI parasites and empirical treatment (I think this has already been done).
- Consider hydrolyzed protein or novel protein prescription diet.
- Recommend probiotic therapy.
- If symptomatic therapy and dietary therapy are unsuccessful then consider obtaining GI biopsies and continued monitoring of the lymph nodes.

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davis,finn
linear ab
L14-6Ns
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AP 96.6% MI 0.9 TIS 0.1
Dist 0.33 cm
SI
mindray
M8 Elite


IntraPet Imaging RBIILLC
davis,finn
Abd small I
C11-3s
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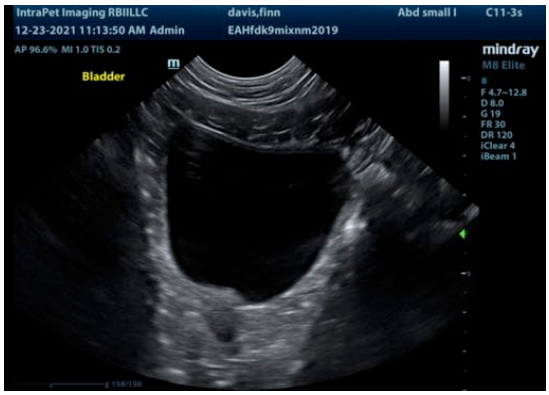
Lt Kidney
Dist 6.71 cm
mindray
M8 Elite


IntraPet Imaging RBIILLC
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Abd small I
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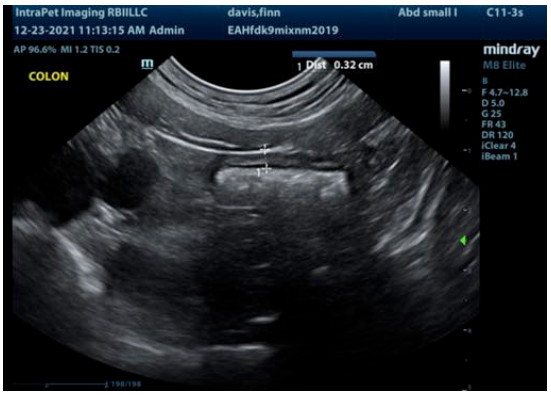
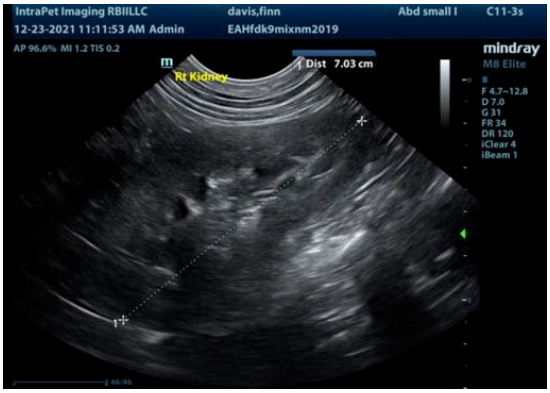
Bladder
mindray
M8 Elite


IntraPet Imaging RBIILLC
davis,finn
Abd small I
C11-3s
12-23-2021 11:13:15 AM Admin
EAHfdk9mixnm2019
AP 96.6% MI 1.2 TIS 0.2
COLON
Dist 0.32 cm
mindray
M8 Elite


IntraPet Imaging RBIILLC
davis,finn
Abd small I
C11-3s
12-23-2021 11:11:53 AM Admin
EAHfdk9mixnm2019
AP 96.6% MI 1.2 TIS 0.2
Rt Kidney
Dist 7.03 cm
mindray
M8 Elite


IntraPet Imaging RBIILLC
davis,finn
Abd small I
C11-3s
12-23-2021 11:10:39 AM Admin
EAHfdk9mixnm2019
AP 96.6% MI 1.1 TIS 0.2
Liver
GB
mindray
M8 Elite

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.

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