

**DATE PRESENTING CLINICAL SIGNS**

5/31/22

PATIENT

Little E Perkins

SPECIES

Feline

BREED

DSJ

SEX

Neutered Male

AGE

3/8/10

WEIGHT

14 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency
Hospital

REFERRING VET

Dr. Kalwa

INVOICE

38101

Diabetic - Hyporexia --> Not eating enough at feedings - Added mirtaz TD 3 nights + cerenia - PU/PD. Lethargy - Insulin- giving at feedings- less dose due to dec eating - 5/20 wellness curve- no ketones, gained weight - Called vet thurs- no openings. Medications: - Lantus 2.5 U BID - Cerenia - Mirtazapine TD - Gabapentin Given once. According to O:
Eating but eating less for a good while O wasting multiple foods trying to get him to eat 5/20 saw rDVM for this Had BG curve + wellness exam Even when he ate BG was 84 Gained weight 14 lbs (previously 11.8 lbs) Decreased patient from 3 U to 2.5 U BID. Since leaving 5/20 at rDVM Owner only given the 2.5 U twice because she feels he is not eating enough. O keeps a diary of this Has urinated inappropriately twice in dining room. O tried mirtazapine and cerenia No vomiting, Eating but not as much seems interested- needing multiple types tried multiple brands. First diagnosed with Diabetes in october 2020 No hx of UTI

Current Medications: Vitamin B.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
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 left kidney is normal in size (3.96 cm), but irregular in shape. Overall echogenicity is slightly hyperechoic with poor 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. Numerous small cortical cysts are present, the largest measuring 1.03 cm, and evidence of previous infarcts. Renal vasculature is normal.

The right kidney is normal in size (3.1 cm), but mild focal irregularities in shape are present, most consistent with previous infarcts. Overall echogenicity is slightly hyperechoic with poor 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. Numerous small cortical cysts are present. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.49 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 0.34 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 normal in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. 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 primarily anechoic. 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 0.33 cm with mild mucosal speckling. 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 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. Prominent pancreatic duct noted at 0.22 cm.

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.

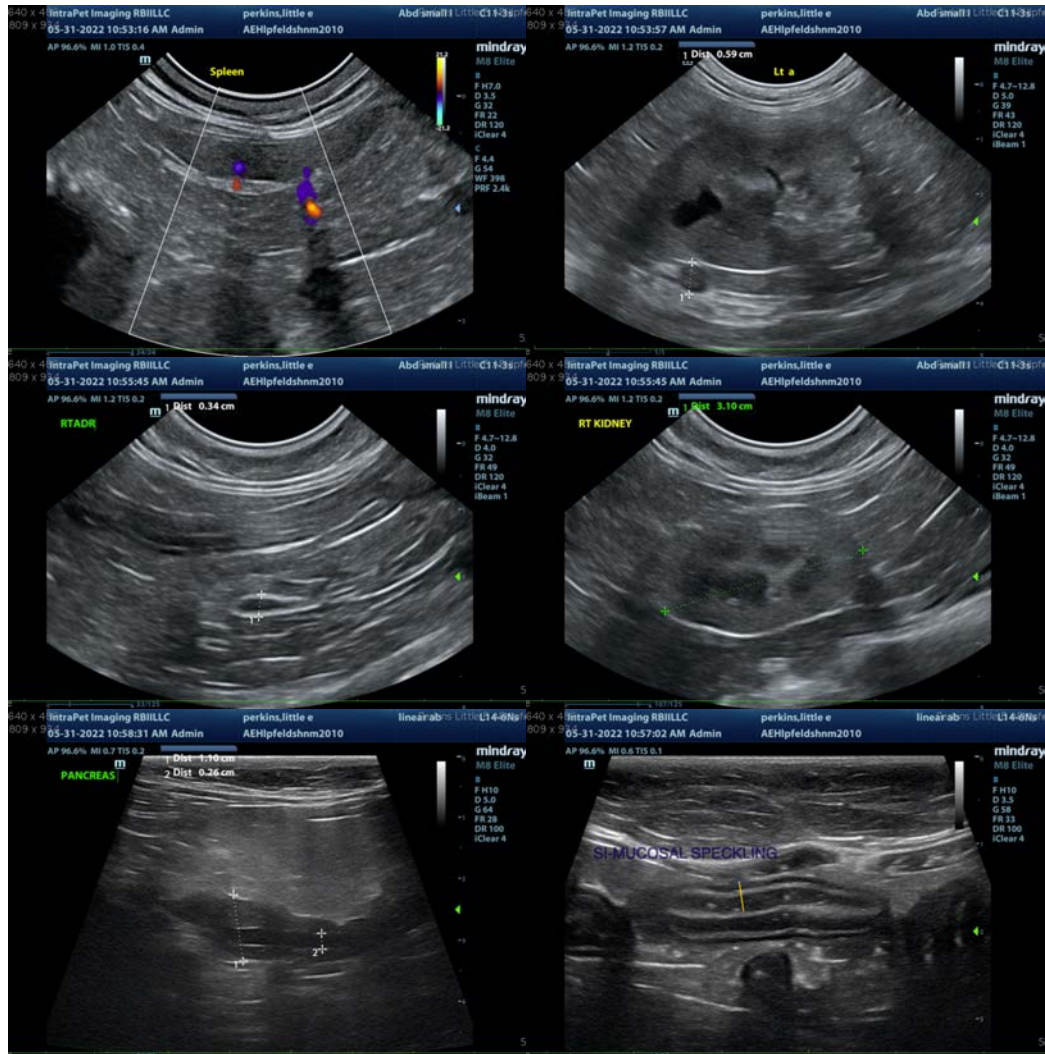
ULTRASONOGRAPHIC FINDINGS

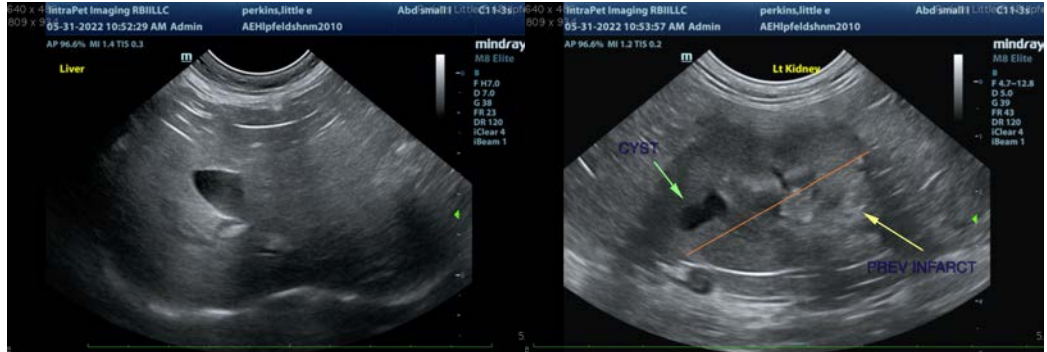
- Decreased corticomedullary distinction in both kidneys with evidence of previous infarcts and small cortical cysts – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Prominent, hypoechoic pancreas with prominent pancreatic duct – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Hyperechoic liver – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.
- Prominent muscularis layer of the small intestine with mild mucosal speckling – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No prominent focal mass lesions or gastrointestinal lesions are observed. Many of the changes seen on today's scan are common in diabetic cats. These include a hyperechoic liver and prominent pancreas. Recommend a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine. With the absence of significant liver enzyme elevations, I suspect the hyperechoic liver is due to fatty infiltration, etc., but if this patient is not doing well, you could consider a fine needle aspirate to look for underlying round cell neoplasia.

Additionally, there are some areas of prominent small intestine with a prominent muscularis layer and mucosal speckling. These changes could be consistent with underlying gastrointestinal disease (although a prominent muscularis layer can be seen in some normal older cats). Consider a novel protein/hydrolyzed protein prescription diet if this does not interfere with diabetic regulation too much. Consider chronic probiotic therapy. If symptoms are not responsive to treatment for pancreatitis, a diet change, etc., then consider obtaining GI biopsies. Additionally, consider the option of a freestyle libre if this will help with at home diabetic management, although this is not always well tolerated in cats.





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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