IMAGING PERFORMED BY

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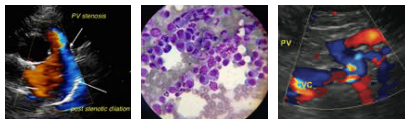

SonoPath
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DATE
10/6/21

PATIENT
Zak Feldmann

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Neutered male

AGE
2012

WEIGHT
12.42 lbs

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

HOSPITAL NAME
Stevenson Village VH

REFERRING VET
Dr. Rathbun

INVOICE
92202

PRESENTING CLINICAL SIGNS

Chronic history of recurrent GI signs (vomiting and diarrhea) for >1 year. Had flair up in May 2021 and Zak was diagnosed with pancreatitis at that time. There had been suspicion of possible underlying IBD or primary GI disease, but Zak's clinical signs resolved temporarily and the O did not elect further work up at that time. Zak has been vomiting more frequently over the past few weeks and was placed on EOD cerenia, which seemed to prevent the vomiting while he was on it for 2 weeks, but the vomiting resumed once he came off of it and soft stools had been developing as well. Appetite has remained good and he does not appear to be losing weight.
Current Medications: Cerenia 16 mg tab (1/2 tab, PO, EOD)
Lab Results: Comprehensive blood work performed on 5/1/2021 showed elevated amylase: 1520 IU/L (100-1200), elevated cholesterol: 326 mg/dL (75-220) and elevated PSL Lipase: 44 U/L (8-26), otherwise NSF. Texas A&M GI panel performed on 5/4/21 showed normal cobalamin, folate and TLI, but elevated PLI: 13.2 ug/L (<3.5)
Date of Previous IntraPet Ultrasound: No previous
Sedation: not needed
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 has a normal shape and size (3.76 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 (3.95 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 0.35 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 0.48 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, and echogenicity with smooth peripheral margins. The parenchyma is homogenous 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 gallbladder 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. The jejunum measured 0.21 cm, 0.22 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 hypoechoic, nodular and prominent.

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
PRIMARY FINDINGS:

- Prominent, hypoechoic/nodular pancreas. The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation. The findings are likely consistent with nodular hyperplasia, but neoplastic change cannot be excluded as a possibility.

- 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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
The pancreas is prominent throughout the abdomen and hypoechoic with ill-defined nodules. This is most consistent with nodular hyperplasia likely associated with previous bouts of inflammation. I recommend rechecking a quantitative fPLI to ascertain the current level of active inflammation.

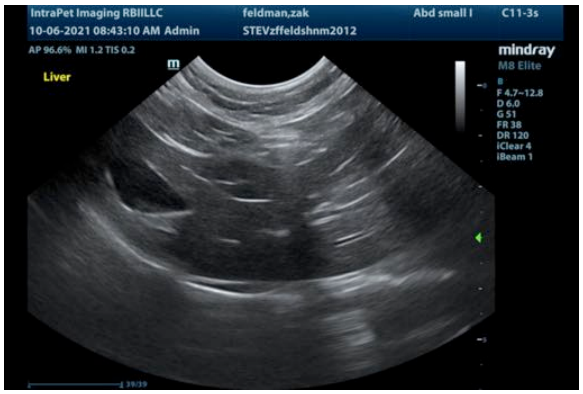
The small intestinal changes are relatively mild; however, given the history I would not be surprised if you do have a chronic, inflammatory condition associated with pancreatic disease present. I recommend recheck blood work to ensure that there is no new metabolic conditions goind on particularly a thyroid level. If

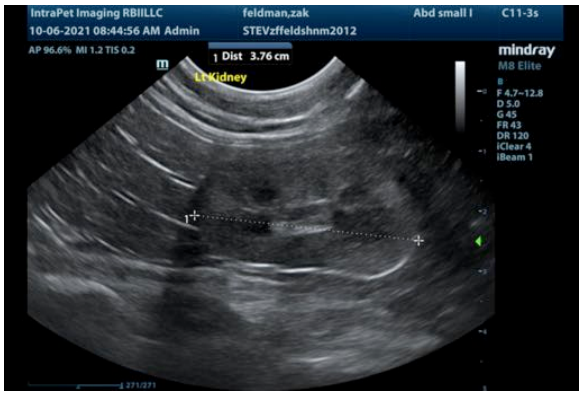
metabolic disease is thought less likely consider such primary GI causes as GI parasitism, bacterial dysbiosis, food allergy, IBD and less likely intestinal neoplasia.

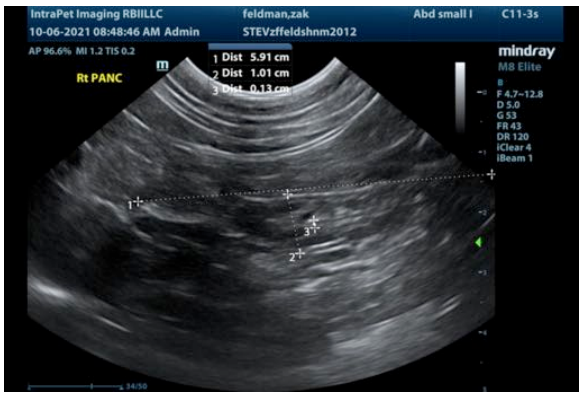
In older patients with more chronic symptoms, I would most strongly consider food allergy, IBD, and intestinal neoplasia.

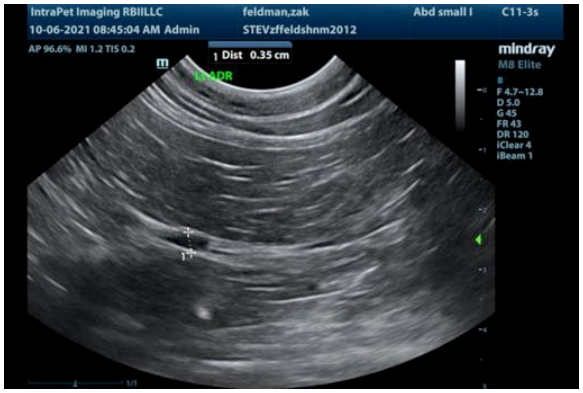
- Recommend diet trial with a novel protein/hydrolyzed prescription diet
- Recommend GI panel for evaluation of B12 levels etc.. (start empirical B12 while waiting for results)
- If symptoms are progressing consider obtaining GI biopsies

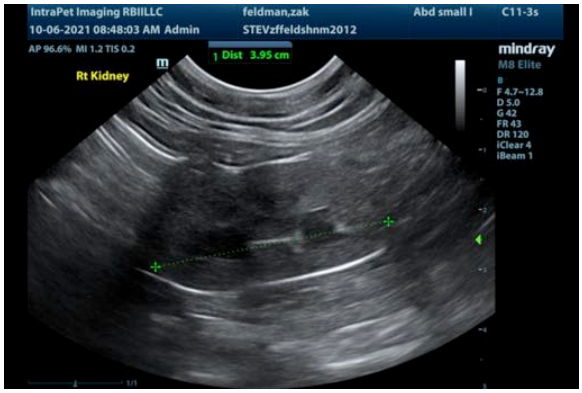
As time goes on with recurrent episodes the indication for possibly biopsy is increased.

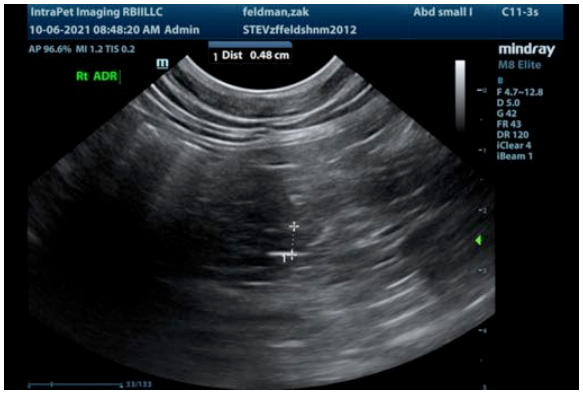












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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