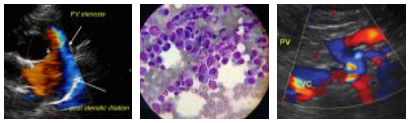
IMAGING PERFORMED BY

IntraPet.com



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DATE

8.11.2023

PATIENT

Buddy Martin

SPECIES

Feline

BREED

Tonkinese

SEX

Neutered Male

AGE

1/5/2013

WEIGHT

7.3blbs

INTERPRETED BY

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

HOSPITAL NAME

Homeward Bound VS

REFERRING VET

Dr. Vance

INVOICE

14071

PRESENTING CLINICAL SIGNS

Rads- Lateral- Stomach with food. Some loss of detail in this area of cranial abdomen. Multiple loops of SI, possibly thickened. Some stool in colon. Small bladder. V-D - loss of detail cranial abdomen. Oval soft tissue density left side in area of left kidney - enlarged left kidney vs other?; mass?

Current Medications: None listed.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 right kidney has a normal shape and size (3.40 cm). Overall echogenicity is slightly hyperechoic with mildly reduced corticomedullary distinction and a typical 1:3 cortex:medulla ratio. A mild medullary rim sign is evident. Pyelectasia is noted at 0.38 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.49 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. A mild medullary rim sign is evident. Mild pyelectasia is noted at 0.34 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.42 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 0.49 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 (0.70 cm), 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 gall bladder 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 <0.36 cm 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 duodenum measured 0.30 cm in diameter and the jejunum measured 0.25 cm in diameter. Visualized peristalsis appears appropriate. There is a focal section of small bowel which appears to have more severe wall thickening and irregularity, with the wall measuring up to 0.60 cm. In this area, there is isoechoic non-shadowing material dilating the lumen, possibly consistent with intramural tissue, an atypical foreign body, etc. An obstructive pattern is not evident at this site.

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 mottled 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.

Free Abdomen

There is scant free abdominal fluid noted. There are occasional prominent mesenteric lymph nodes (example of which measure 0.35, 0.40, and 0.42 cm) The omentum is generally mildly increased, particularly around the irregular bowel loop and kidneys.

ULTRASONOGRAPHIC FINDINGS

- Decreased corticomedullary distinction and mild medullary rim sign visualized in both kidneys, with mild bilateral pyelectasia - Clinical significance uncertain, can be seen in normal patients and in cases of ethylene glycol toxicity, FIP, chronic interstitial nephritis, and leptospirosis. Pyelectasia of the kidneys could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

- Prominent mottled pancreas - The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

- Diffuse thickening of the small intestinal with prominent muscularis layer, a well as a focal section of small intestine, with irregular thickened wall and atypical dilation/intraluminal material - The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia. The nature of the abnormal section of bowel is uncertain. Further investigation is warranted.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

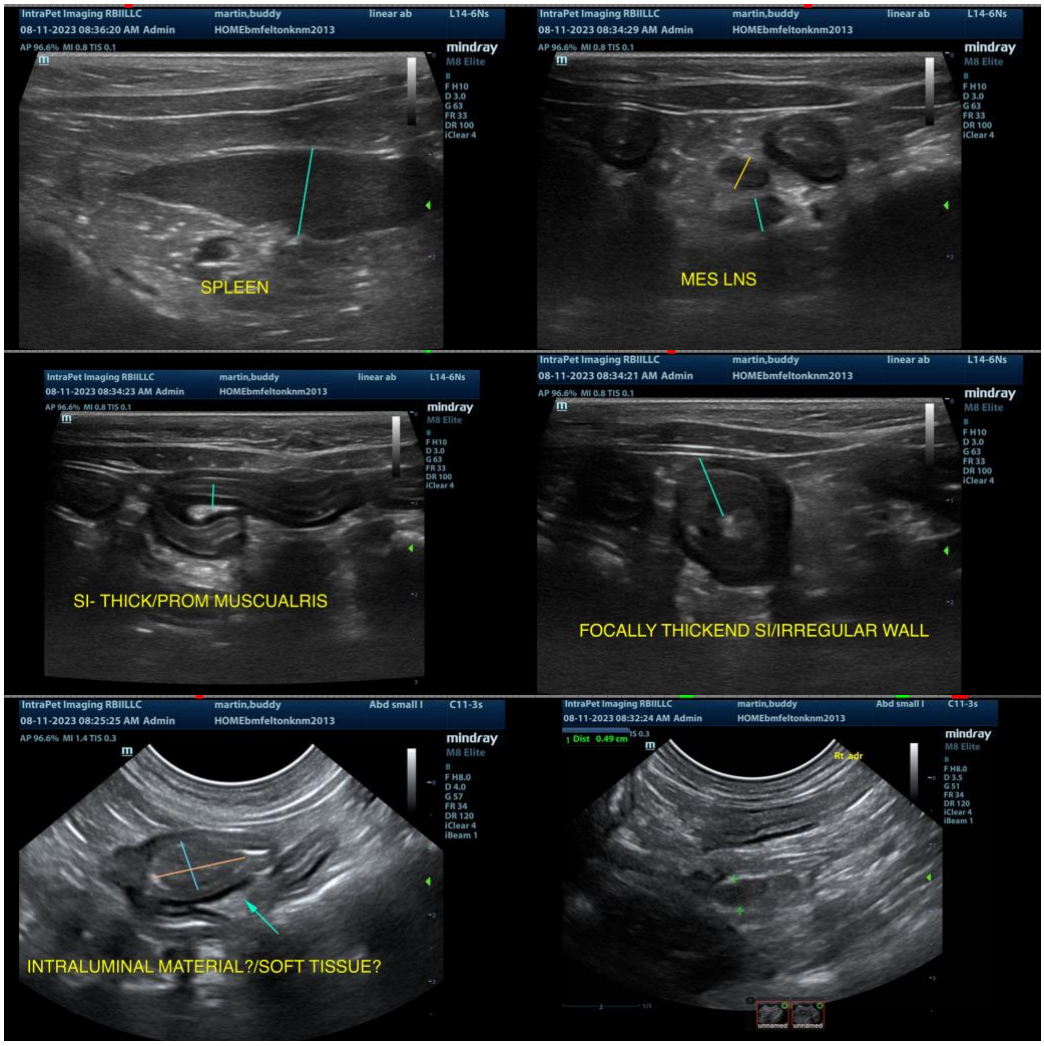
There is the general appearance of diffusely thickened small intestine with a prominent muscularis layer and general abdominal inflammation. There is a focal section of bowel which appears abnormal in that the wall is more thickened and irregular, and there is non-shadowing luminal dilation, possibly due to tissue (?), or non-shadowing intraluminal foreign material. An obvious obstruction pattern is not evident at this time. But, given the changes to the bowel reported in the symptoms, surgical evaluation for GI biopsies, biopsies of the mesenteric lymph nodes, and evaluation of the irregular section of bowel could be considered.

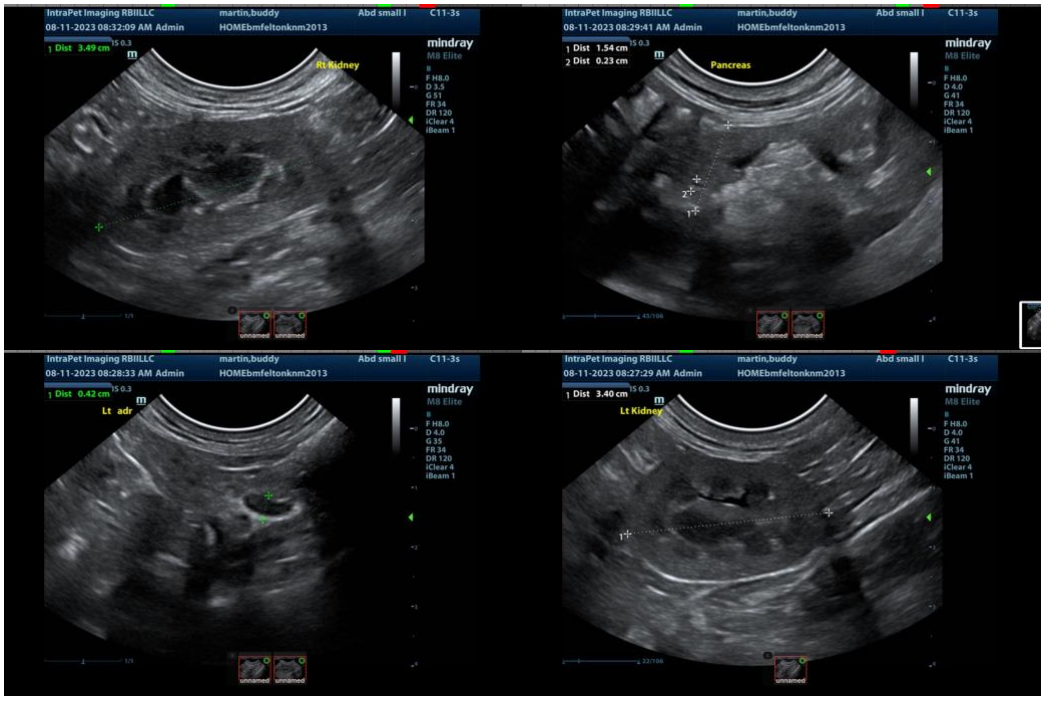
There are some prominent mesenteric lymph nodes. I suspect they would be challenging to sample, but an aspirate could be considered.

Additionally, both kidneys appear somewhat abnormal with nonspecific changes. There is bilateral pyelectasia evident, with not obvious evidence of an obstruction visualized. A urinalysis, culture and blood pressure is warranted.

General additional recommendations would include:

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks).
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc. to further evaluate for pancreatic/small intestinal disease.
- Recommended chronic probiotic therapy.





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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