

**DATE PRESENTING CLINICAL SIGNS**

1/19/22 History: Decreased appetite for 6 months, decreased weight (15%) vomits infrequently, intermittent soft stool, PE- BCS 3.5/9, generalized muscle wasting, gurgly intestines, round ST mass palp just cranial to bladder ~3/4-1cm.

PATIENT

Chip Hartmuller

Lab Results: increased WBC 26k w/ neutrophilia 20k + mild toxic changes, HCT 31%, BUN 29; creat 1.5; T4 0.6; Free T4 26.1, USG 1.077.

SPECIES

Feline

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Singapura

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.

SEX

Neutered Male

The left kidney has a normal shape and size (3.57 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.

AGE

9/1/11

WEIGHT

6.8 Pounds

The right kidney has a normal shape and size (3.78 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.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.34 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.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

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.

HOSPITAL NAME**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.

Jacksonville Vet Clinic

REFERRING VET

Dr. Thai

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.

INVOICE

34374

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.

Many of the visualized areas of small intestine 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. Visualized peristalsis appears appropriate. A focal lesion is observed with intraluminal shadowing material with a "hairball type density" within it, and thickened wall with loss of layering, creating somewhat of mass effect. The maximal thickness of wall in this area is 1.2 cm. The shadowing material within the lumen measures 2.8 cm in width. Findings could be consistent with focal severe enteritis or a mass effect.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed liquid 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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a mild mesenteric lymphadenopathy present with clusters of mesenteric lymph nodes measuring 0.31 cm, 0.27 cm and a larger lymph node measuring 1.23 cm 0.94 cm. The omentum is of increased echogenicity around the abnormal bowel and clusters of mesenteric lymph nodes.

PRIMARY FINDINGS

- Focal area of bowel with wall thickening, loss of layering, and intraluminal shadowing material – concerning for possible bowel mass, although focal severe enteritis, FIP, etc. could be alternate differentials. Additionally, there appears to be somewhat obstructive intraluminal material.
- Diffusely prominent muscularis layer of the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a lower possibility of emerging lymphoma.
- Mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis, lymphoid hyperplasia, neoplasia.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

SECONDARY FINDINGS

- Liquid stool in the colon – consistent with soft stool/diarrhea.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

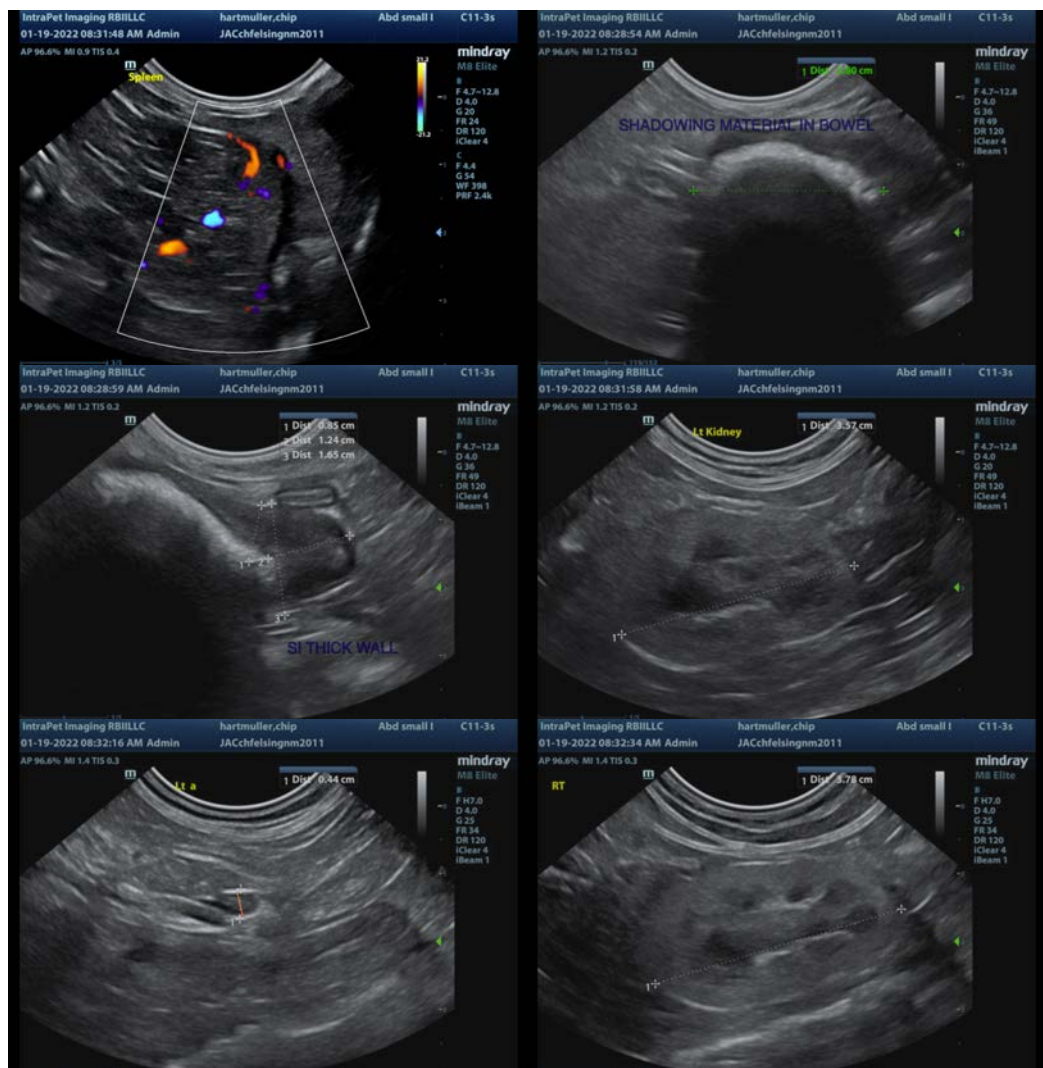
There is diffuse bowel thickening and a prominent muscularis layer of the small intestine in addition to prominent mesenteric lymph nodes.

These findings would be concerning for diffuse inflammatory changes such as IBD, food allergy, possibly neoplastic change.

Unfortunately, there is a more distinct lesion consisting of shadowing intraluminal material and thickened, irregular bowel wall with complete loss of layering. These findings are concerning for either a foreign body with severe focal enteritis or with diseased bowel (focal enteritis, FIP, neoplasia), trapping intraluminal foreign material. With a chronic history, the latter seems more likely.

The most definitive way to deal with this situation is to explore surgically, and likely obtain biopsies +/- resect diseased tissue (biopsy bowel in several areas, mesenteric lymph nodes, etc.). Alternately, you could consider a fine needle aspirate of the thickened area of the wall of the abnormal bowel. This could potentially diagnosis an underlying neoplastic condition, but would not address the intraluminal material.

Recommend 3-view thoracic radiographs and FELV/FIV testing.





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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