

**DATE**

9/23/22

PRESENTING CLINICAL SIGNS

History: Constipation.

PATIENT

Tulip Marsheck

Current Medications: None listed.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Feline

Imaging Performed By: Rachel Brillhart, RDMS.

BREED

DSH

SEX

Spayed Female

AGE

9/9/06

WEIGHT

6.4 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**HOSPITAL NAME**

Homeward Bound VS

REFERRING VET

Dr. Vance

INVOICE

17427

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Left kidney is normal is size (3.31 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A 0.8 cm in diameter well defined anechoic structure was noted with some echogenic debris and septations noted in the caudal pole of the left kidney.

Right kidney is normal is size (3.37 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

Left adrenal gland is normal in size (0.39 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.49 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The colon is overall approaching the upper limit of normal thickness, measuring between 0.15 cm and 0.2 cm thick but with a subjectively thick muscularis layer. Layering is intact.

Pancreas

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

Free Abdomen

Hypoechoic, round prominent lymph nodes were noted around the colon and medial iliac area.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- A mildly thick colon with a primarily thick muscularis layer. This finding can be seen with both benign infiltrative inflammatory bowel disease, as well as infiltrative inflammatory bowel disease, as well as infiltrative neoplasia, such as lymphoma and can't be differentiated without tissue sampling. No loss of layering is present, however, to make lymphoma more probable.
- Colonic and medial iliac lymphadenopathy, both reactive lymphadenopathy, as well as infiltrative neoplasia are differentials and cannot be determined without tissue sampling.
- An anechoic lesion on caudal pole of the left kidney is consistent with a complex cyst, however, other differentials, such as a hematoma, abscess or even infiltrative neoplasia or metastatic disease cannot be ruled out, although infiltrative neoplasia is considered less likely.

Secondary Findings

- Gallbladder debris – Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness, however, it can also be associated with hepatobiliary disease in cats and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- Chronic active pancreatitis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If not recently evaluated, routine labs, including CBC/chemistry panel, electrolytes and urinalysis are recommended to further assess this patient's kidneys, as well as hydration status, etc. to look for underlying causes that may predispose to the reported constipation.

Given the focal colonic involvement for the suspected infiltrative bowel disease, a fecal exam is

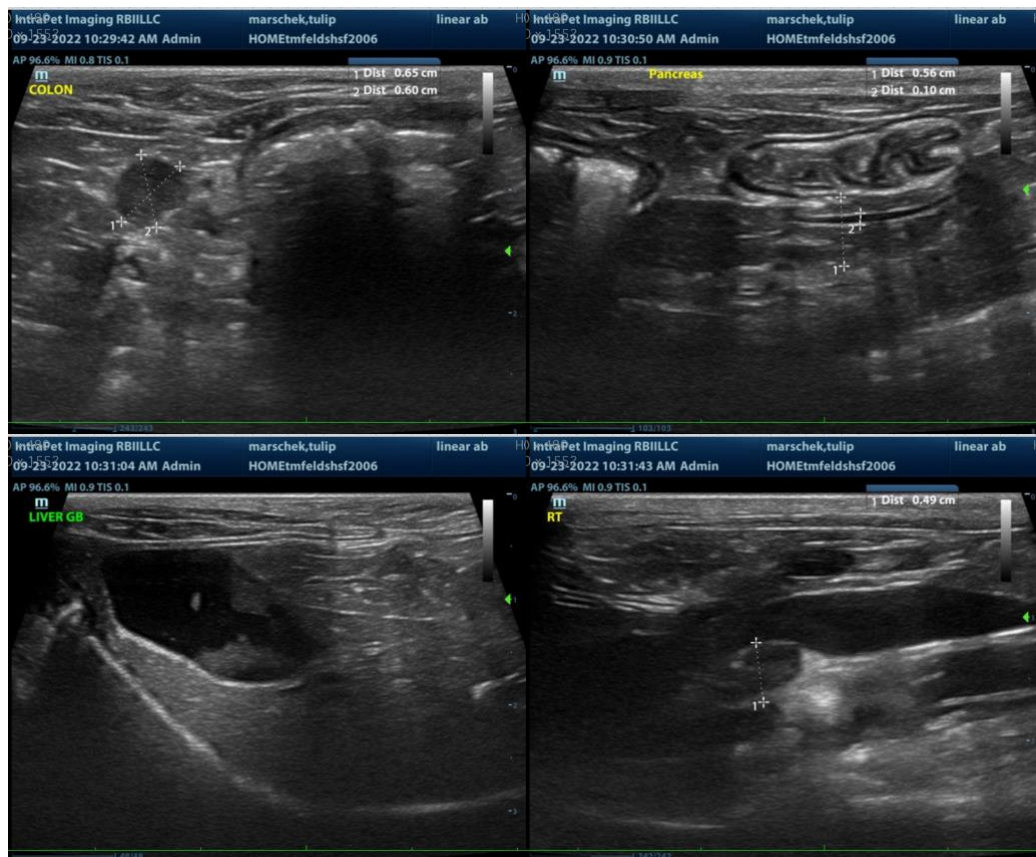
recommended, as well as a fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

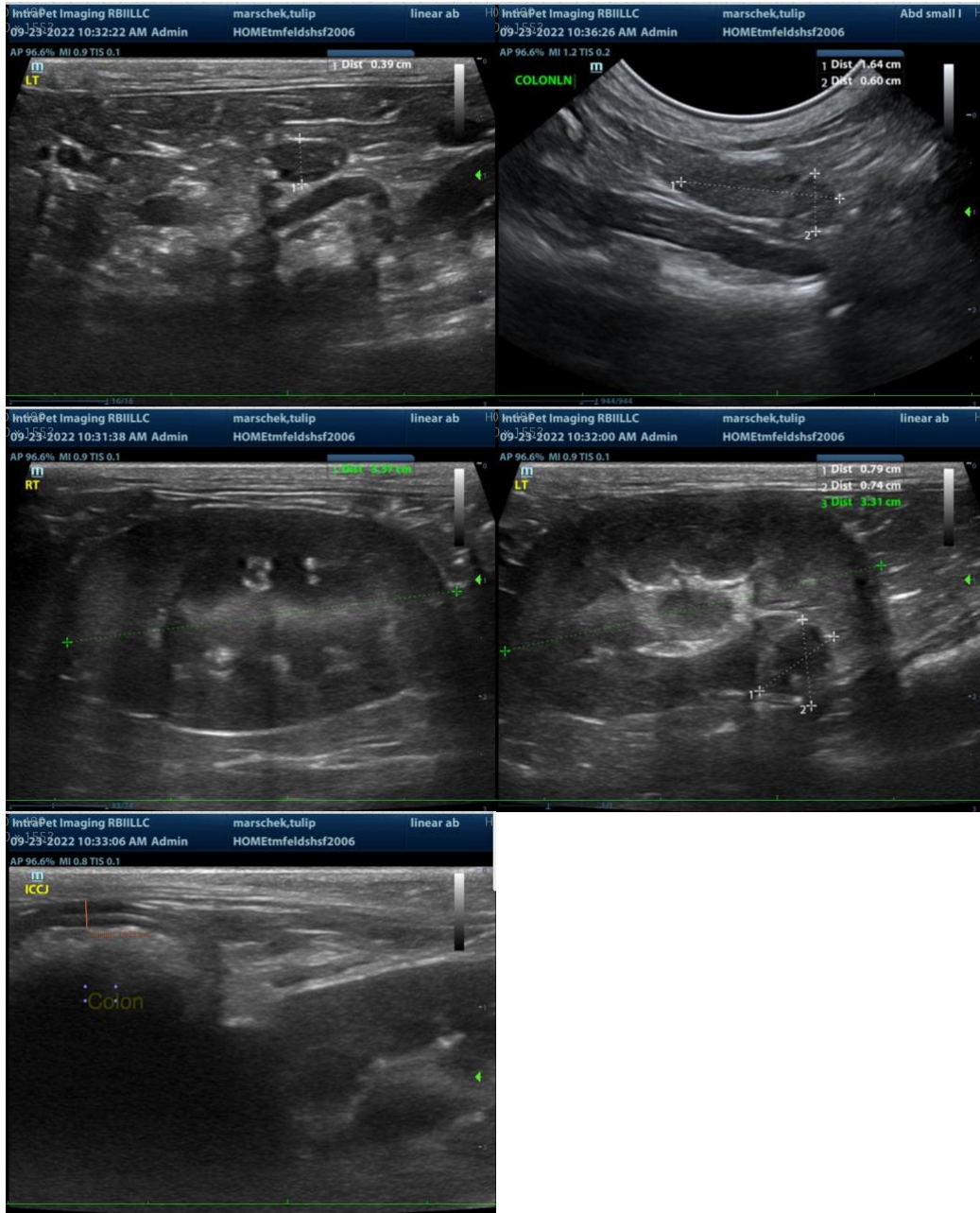
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

Ultimately, tissue sampling is likely required and could be obtained in the form of a fine needle aspirate of the enlarged lymph nodes if possible and if patients coagulation status is appropriate or via colonoscopy for biopsies, if not.

In the meantime, empirical deworming with a 5-day course of Panacur, as well as a probiotic, potentially a stool softener, such as lactulose or Metamucil given the reported constipation, as well as transition to a fiber responsive diet may help control clinical signs.

Additionally, sampling of the kidney lesion could be considered as well if patients coagulation status is appropriate, however, the lesion trends towards the benign, therefore making ultrasonographic monitoring versus sampling a reasonable starting approach.





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.

Beth Johnson, DVM DACVIM

Beth.Johnson@SonoPath.com