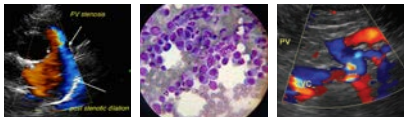
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

4/7/23

PATIENT

Piper Joynes

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

3/1/10

WEIGHT

12 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Homeward Bound

REFERRING VET

Dr. Sorum

INVOICE

46489

PRESENTING CLINICAL SIGNS

Intermittent vomiting and diarrhea. Straining to defecate. O has seen drops of blood in litterbox. Radiologist report: Suspect colitis. Pathologic colonic distention / constipation is NOT documented. The renal changes warrant monitoring for renal insufficiency. The increased opacity superimposed over the cranioventral thorax is suggestive of summation artifact; however, mediastinal lymphadenopathy, pulmonary infiltrates cannot be ruled out.

Current Medications: Solensia SQ, Lactulose PO
Date of Previous IntraPet Ultrasound: No previous.
Sedation: IM sedation.
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 left kidney has a normal shape and size (3.16 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 (3.26 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 0.39 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 0.37 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 borderline large (1.0 cm at the level of the hilus), 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 gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The bile duct appears somewhat dilated and tortuous, measuring at 0.27 cm. No evidence of obstruction or stone visualized.

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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.24 cm. Jejunum wall measures 0.22 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The area of the ileocecal junction was visualized and does not appear thickened and has adequate layering. More distally, the colon wall becomes hyperechoic, irregular and thickened, measuring approximately 0.50 cm, with hyperechoic mesentery surrounding.

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 0.28 cm.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are occasional prominent mesenteric lymph nodes. One such lymph node measures 0.29 cm. The omentum is hyperechoic around the colon.

Other

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

There is no evidence of a mediastinal mass or pleural effusion.

PRIMARY FINDINGS

- Hypoechoic pancreas with prominent pancreatic duct – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly dilated tortuous gallbladder – This can be a normal finding in some older cats. Correlate with lab findings. No obstruction is visualized.
- Thickened, hyperechoic, irregular colon wall – Findings are concerning for severe colitis or infiltrative disease.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

SECONDARY FINDINGS

- Borderline large spleen – Differentials could include congestion with sedation, infiltration, anatomic variation (big cat).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The small bowel appears relatively normal on today's scan, but the distal colon is significantly thickened and irregular. These findings could be consistent with severe colitis or with infiltrative disease to the colon. Unfortunately, there are many causes for vomiting and diarrhea that cannot be diagnosed by ultrasound alone.

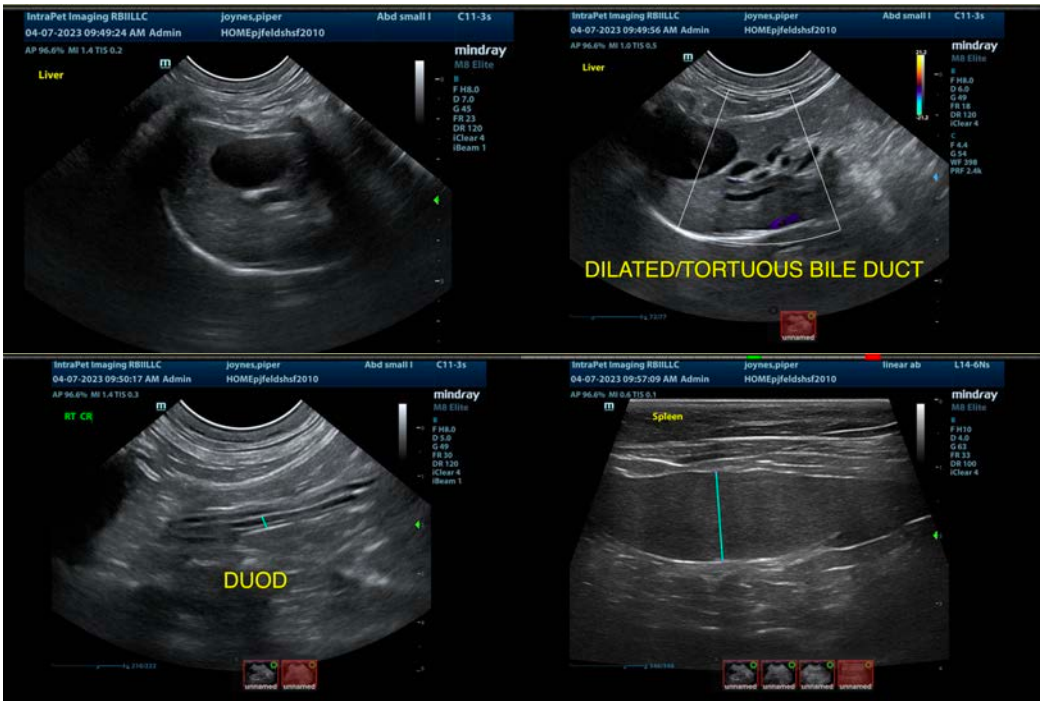
Consider such differentials as food allergy/dietary intolerance, GI parasitism, pancreatitis, dysbiosis, recurrent dietary indiscretion, IBD and less likely neoplasia, etc.…

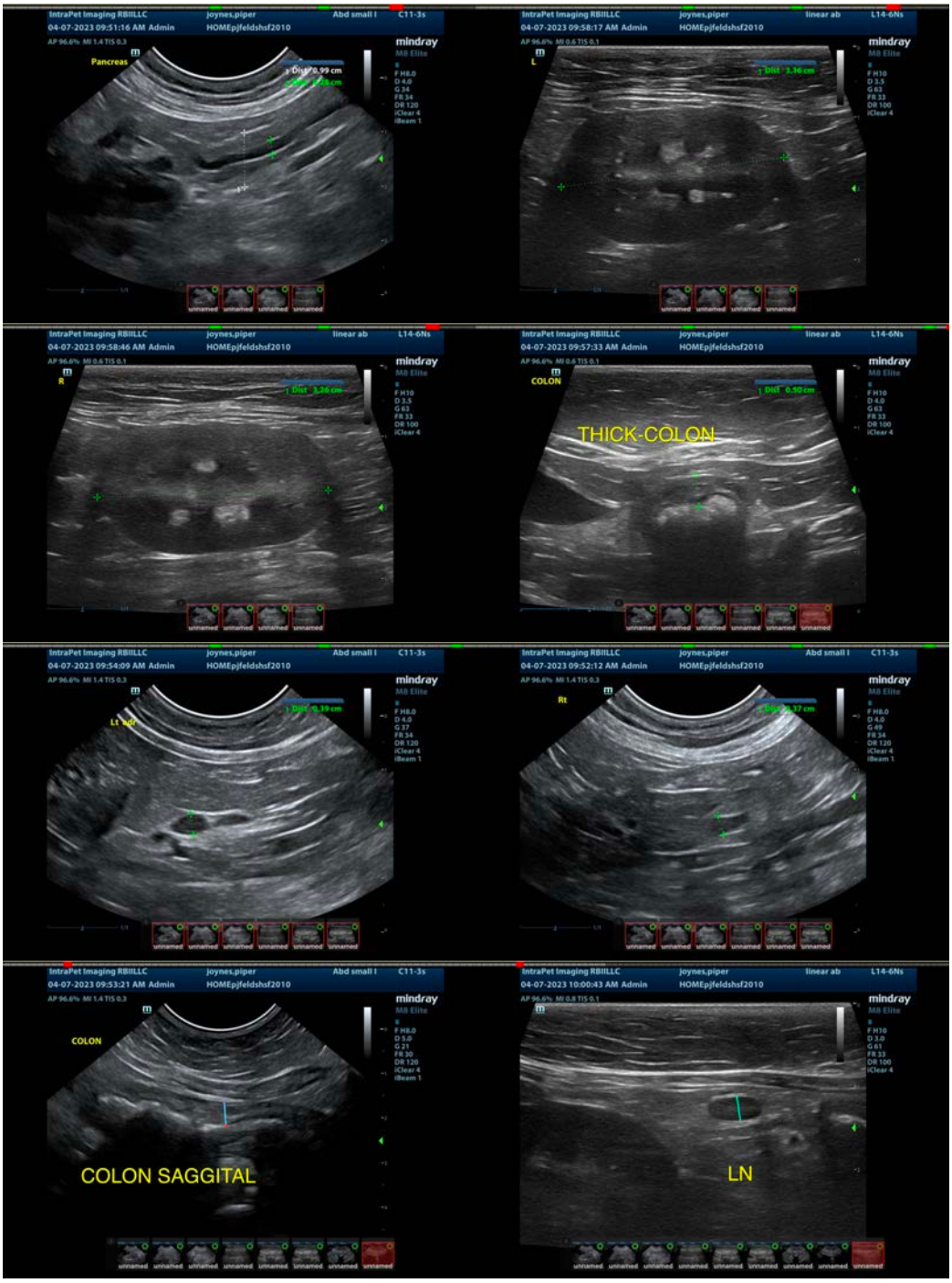
- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy.
- If symptoms are progressing and there is no response to the above measures, consider an upper and lower GI endoscopy to obtain biopsies in these areas.

The pancreas appears very prominent and hypoechoic with only mild surrounding inflammation. These are changes are consistent with either active pancreatitis or previous episodes of pancreatitis. Correlate these findings with a quantitative fPLI and consider empirical treatment for pancreatitis.

The bile duct appears somewhat tortuous and mildly dilated. I suspect this is an insignificant finding, but continued monitoring of liver values and the bile duct with ultrasound is warranted.

No pleural effusion or thoracic masses were visualized on today's exam. If this is strongly suspected, consider a contrast CT scan of the thorax.




Pancreas
L
R
COLON
THICK-COLON
Lt kdy
Rt
COLON
COLON SAGGITAL
LN

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com