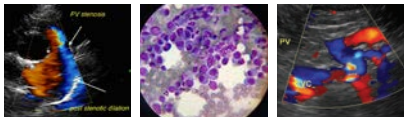
IMAGING PERFORMED BY

IntraPet.com



SonoPath

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DATE

12/15/21

PATIENT

Murphy Lapato

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11/10/10

WEIGHT

6.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Mt. Airy AH

REFERRING VET

Dr. Riley

INVOICE

33466

PRESENTING CLINICAL SIGNS

History: not eating as much, lethargic. PE- abdo painful with gassy bowel loops no obvious masses.

Lab Results: chem- low albumin, low ALT, elevated- TCO2; CBC- slightly low hemoglobin.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
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 (3.51) with a 0.8 cm non-obstructive nephrolith. Overall echogenicity is slightly hyperechoic with poor 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 (4.09 cm). Overall echogenicity is slightly hyperechoic with poor 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 region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

Spleen

The spleen is subjectively normal in size (0.8 cm in width at 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 primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

Many of the visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is generally mildly increased. Bowel loops follow a curvilinear path, but many areas have prominent muscularis layer and a foggy/edematous appearing mucosa. The duodenum appears somewhat thickened, and the jejunum measures at 0.35, 0.37, 0.32 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction.

The ileocecal junction was visualized. The proximal colon exhibited largely intact wall layering and is subjectively of normal thickness. There is a section of transverse colon caudomedial to the spleen and adjacent to the pancreas that appears to have focal wall thickening measuring 0.82 cm. I suspect this is adherent pancreas to the transverse colon, but a focal colonic mass cannot be ruled out. Mixed solid and liquid fecal material and gas are shadowing throughout a somewhat distended colon.

Pancreas

The pancreas is large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild/moderate pancreatitis. Pancreatic duct is prominent at 0.24 cm.

Free Abdomen

There is scant amount of free anechoic fluid. There are prominent mesenteric lymph nodes, particularly around the ileocecal junction, measuring 0.37, 0.57 cm. The omentum is of increased echogenicity around the pancreas and ileocecal junction.

PRIMARY FINDINGS

- Generalized small intestinal thickening with mucosal fogging evident – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.

- Large, prominent pancreas with dilated pancreatic duct – The pancreatic changes are most consistent with mild/moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.

- Focal wall thickening of the transverse colon – I suspect this adherent abnormal pancreatic tissue, but a focal colonic mass cannot be excluded as a possibility.

- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

SECONDARY FINDINGS

- Decreased corticomedullary distinction in both kidneys with a left-sided, non-obstructive nephrolith – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

- Shadowing ingesta visualized within the gastric lumen – Correlate with feeding history and abdominal radiographs. I suspect this is normal ingesta, but if patient had a prolonged fast, then consider such differentials as delayed gastric emptying or partial outflow tract obstruction (none visualized).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

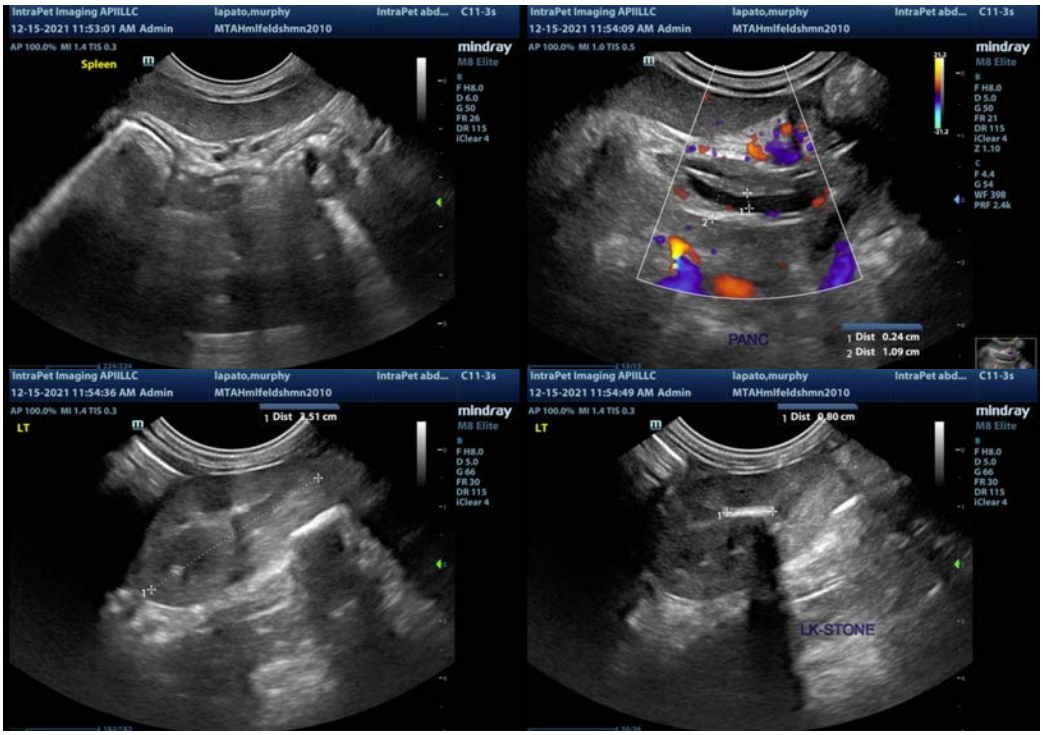
There is the general impression of small intestinal thickening and abnormal small intestine. Additionally, the pancreas is very prominent. There is focal section of transverse colon, which appears to have a focal thickening of the wall. This area is adjacent to the abnormal pancreatic tissue, and there is the possibility that this represents pancreatic tissue adhered to the colon wall. If possible, a fine needle aspirate of this area could help to differentiate. The low albumin reported is concerning and is likely associated with a protein losing enteropathy, but given the low ALT and abnormal kidneys, I would recommend a urine protein/creatinine ratio and a liver function test to rule out liver and kidneys as a source of protein loss. Additionally, I would recommend a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreatic and small intestinal changes observed. Options moving forward include a more conservative approach including:

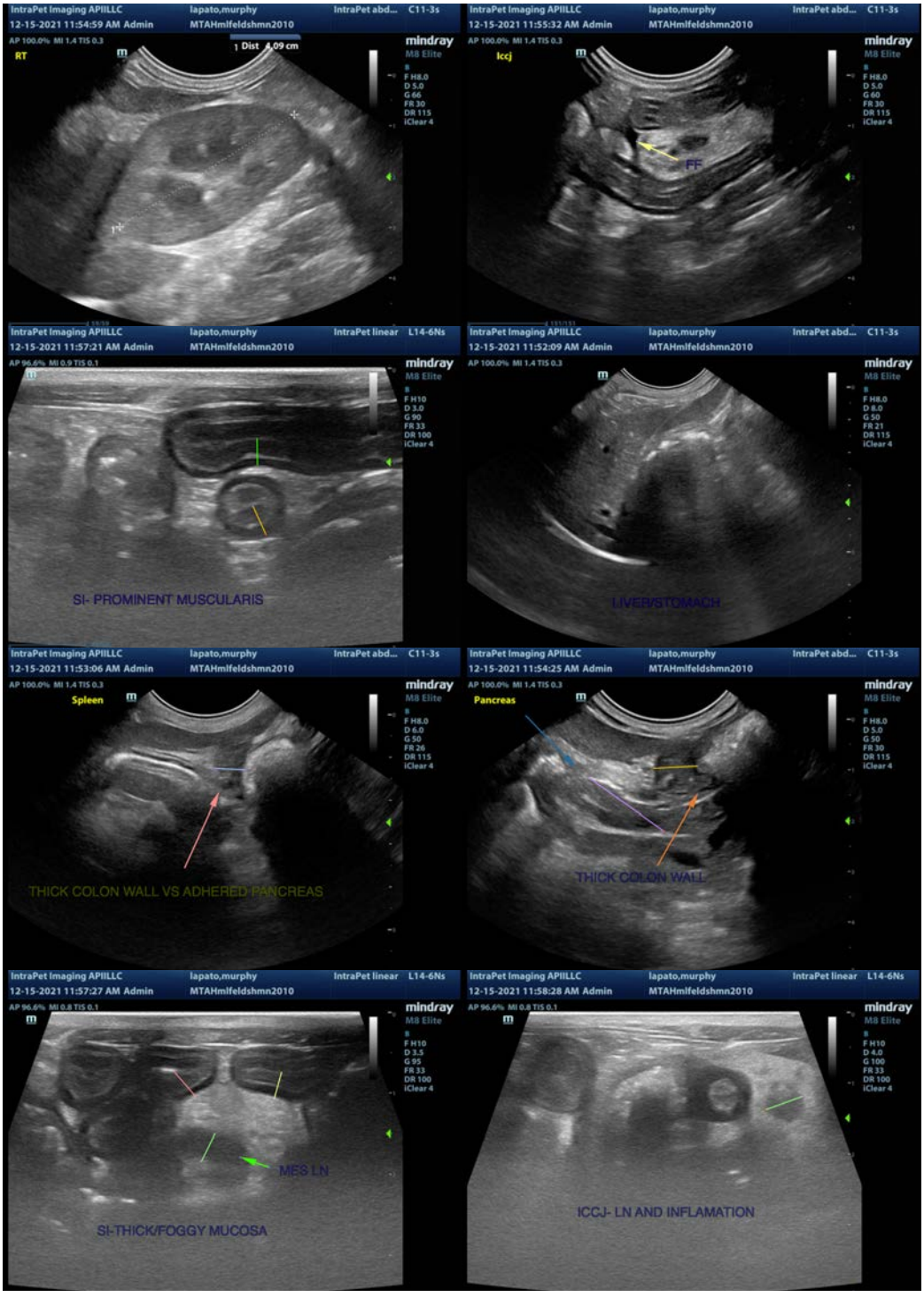
- Transition to a novel protein or hydrolyzed protein diet
- Symptomatic treatment for pancreatitis/enteritis with anti-nausea medications, pain medications, etc.
- Probiotic therapy (this could be done while awaiting lab results).

If symptoms persist, and liver and kidney are excluded as sources of protein loss, I would strongly consider obtaining GI biopsies, either endoscopically or surgically.

Unfortunately, the colon wall thickening/pancreatic adherent tissue issue can only be clarified with surgery or a contrast CT scan. Otherwise, this area can be monitored with ultrasound to see if it progresses or resolves. Additionally, a fine needle aspirate of this area could be considered.

Recommend 3-view thoracic radiographs.




RT
Iccj
FF
SI- PROMINENT MUSCULARIS
LIVER/STOMACH
Spleen
THICK COLON WALL VS ADHERED PANCREAS
Pancreas
THICK COLON WALL
MES LN
SI-THICK/FOGGY MUCOSA
ICCJ- LN AND INFLAMATION

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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