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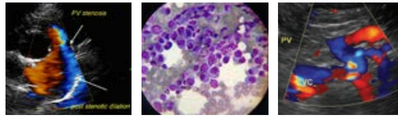

SonoPath
Clinical Sonography & Telecytology
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DATE

2/28/23

PATIENT

Mortimer Fitzgerald

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

2014

WEIGHT

13.14 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Jacksonville VH

REFERRING VET

Dr. Kablis

INVOICE

45561

PRESENTING CLINICAL SIGNS

Not eating/vomiting x1 wk, icteric.

Current Medications: 2/27 LRS 150 ml SQ, Cerenia 0.63ml SQ, Convenia 0.63ml SQ
Elura 0.63ml PO. 2/28 IV Fluids LRS 30ml/hr, Buprenorphine 0.08ml SQ BID, Cerenia 0.63ml SQ inPM.

Lab Results: ALK PHOS 704, T Bili 6.9, WBC 39.43, Neut 25.76, Lymph 8.22, Mono 5.26
fPL abnormal.

Radiographs: Largely NSF.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Declined at this time.
Imaging Performed By: Stephanie Pearce RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

The left kidney has a normal shape and size (4.12 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 (3.97 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 0.31 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 0.40 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 (0.69 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 large in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in 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 appears mildly thickened (0.23 cm) and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains moderate ingesta. 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 uniform diameter with minimal fluid distension. Wall thickness is increased. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering. Jejunum wall measures 0.28 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

Areas of the distal colon are visualized and appear somewhat thickened with reduced detail of wall layering. In these regions, the colon wall measures at 0.57 cm. No abnormalities were visualized associated with the ileocecal junction.

Pancreas

The pancreas is large and hypoechoic to surrounding mesentery, particularly in the right cranial limb. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild moderate pancreatitis.

Free Abdomen

There is a small amount of free fluid. There is a significant lymphadenopathy with a cluster of large hypoechoic lymph nodes at the mesenteric root measuring 2.18 cm, 1.48 cm, and 1.02 cm in diameter. The omentum is hyperechoic around the abnormal lymph nodes and pancreas.

PRIMARY FINDINGS

- Hypoechoic, prominent pancreas with surrounding hyperechoic mesentery in the right cranial abdomen – The pancreatic changes are most consistent with 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.

- Large, hyperechoic liver – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.

- Diffusely thickened small intestine with reduced detail of wall layering – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.

- Thickened colonic wall with reduced detail of wall layering – Differentials include inflammation, infection, or infiltrative neoplasia.

- Severe mesenteric lymphadenopathy – The severe mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

SECONDARY FINDINGS

- Echogenic debris – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.

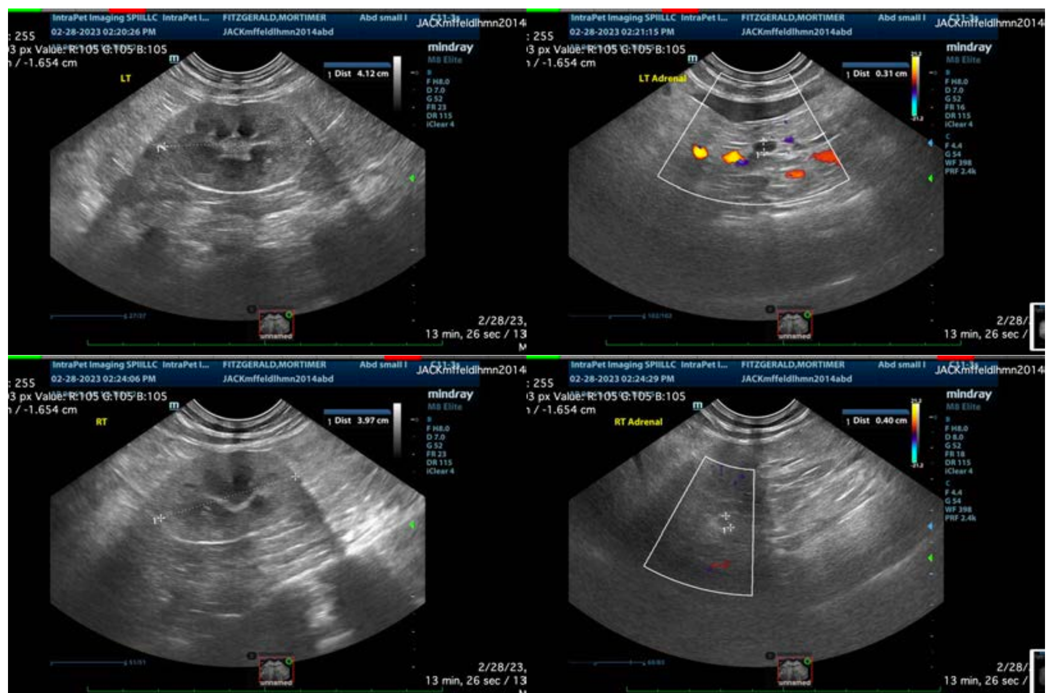
- Mild thickening of the gallbladder wall – The significance of this is uncertain, as there is no surrounding inflammation, but this could be consistent with mild cholecystitis.

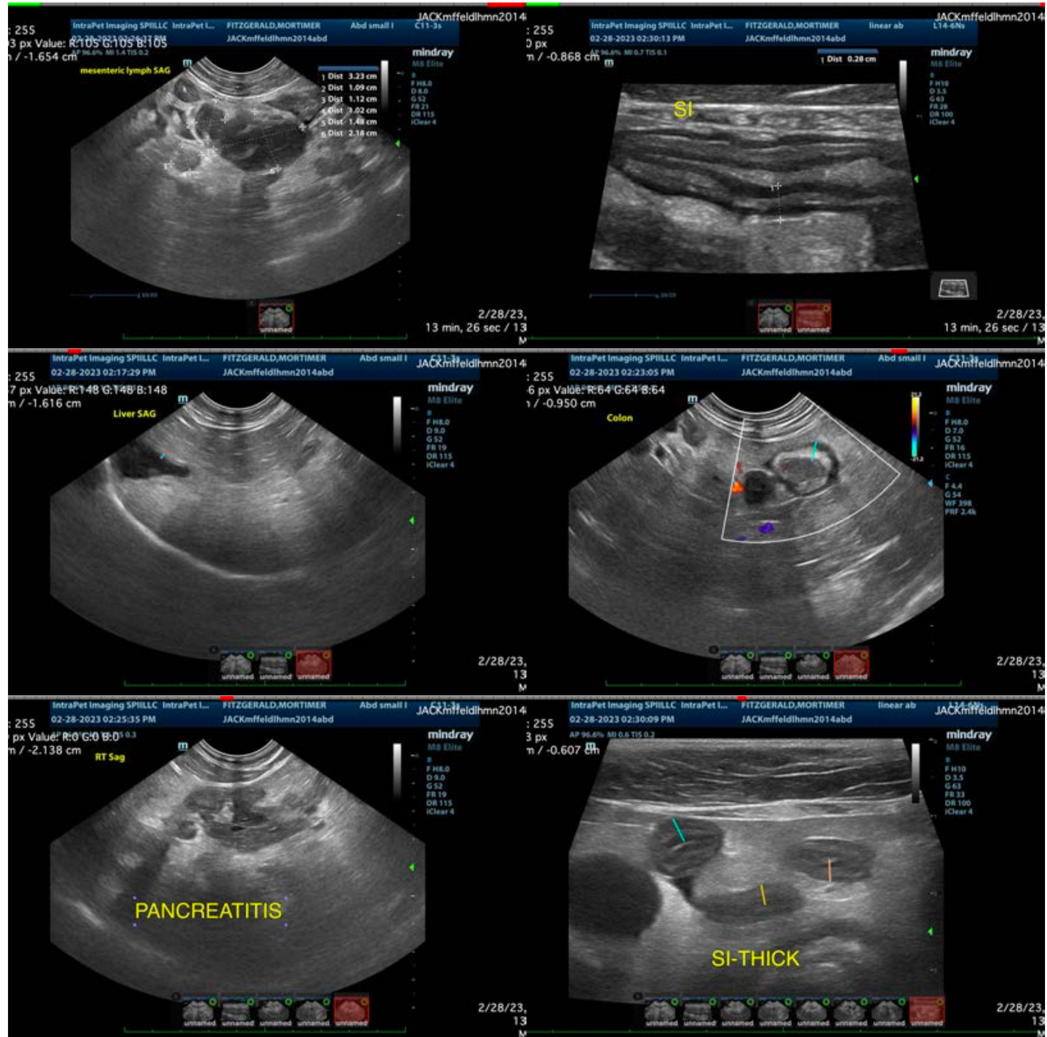
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The combination of the large hypoechoic mesenteric lymph nodes and the thickened colon and small intestinal walls are concerning for an underlying neoplastic process, although some infections and inflammatory processes can present this way. Recommend a fine needle aspirate of a mesenteric lymph node for cytologic evaluation.

The liver is large and hyperechoic with no focal lesions and very mild biliary changes. Findings are supportive of a primary hepatopathy. I would be concerned about the possibility of hepatic lipidosis secondary to the disease process causing the lymphadenopathy, but additionally this could be a primary hepatic disorder. If coagulation parameters are normal, then consider a fine needle aspirate of the liver. If lipidosis is strongly suspected, placement of a feeding tube and supportive care for a primary hepatopathy would be warranted.

The pancreas is prominent and hypoechoic in both limbs, but there is a section in the right cranial abdomen where there is significant surrounding inflammation of the mesentery. This has an appearance most consistent with pancreatic inflammation, although infiltrative disease cannot be ruled out. If a cytologic evaluation of the lymph nodes and liver does not yield a diagnosis, then recommend 3-view thoracic radiographs and stabilization with treatment for pancreatitis and possible placement of a feeding tube, as surgical biopsies could be ultimately necessary (small intestine, lymph node, pancreas, liver, etc.).





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.

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