IMAGING PERFORMED BY

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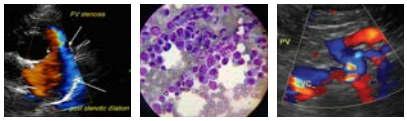

SonoPath
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DATE

11/22/22

PATIENT

Coco Thames

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Intact Female

AGE

4/1/22

WEIGHT

6.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Goessling

INVOICE

42901

PRESENTING CLINICAL SIGNS

Started being sick about 3 days ago- shaking really bad, not sleeping well, breathing heavily/ panting. Bad odor to breath. Poops have been bloody. Did eat some chocolate prior to symptoms starting- Nutty Bar. Not drinking, owner has been syringing her water. Hasn't eaten or drank anything in ab out 3 days. Owner was feeding turkey and sweet potato baby food. Now UTD on vaccines.

Current Medications: Metronidazole, Ondansetron, Ampicillin, Buprenorphine.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
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 (3.53 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 (3.48 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 0.45 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 0.49 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, 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 hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. Prominent portal markings noted. There are two mixed echogenicity, hypoechoic, possibly cavitated looking lesions visualized in the liver. One is located deep in the right cranial aspect of the liver measuring approximately 1.37 cm x 1.23 cm and appears surrounded by hyperechoic tissue. Additionally, there is a lesion visualized in the left side of the liver measuring 1.51 cm x 0.91 cm. There is hyperechoic mesentery in the cranial abdomen in the region of the liver.

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 cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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 0.38 cm. Jejunum wall measures 0.29 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal 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 hypoechoic (particularly in the left limb) 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.

Free Abdomen

There is scant free fluid visualized around the spleen. There are some prominent mesenteric lymph nodes around the hypoechoic pancreas measuring 0.48 cm and 0.32 cm. The omentum is mildly hyperechoic around the pancreas and in the cranial abdomen in the region of the liver.

Other

The uterus and ovaries are visualized and appear within normal limits.

ULTRASONOGRAPHIC FINDINGS

- Prominent, hypoechoic pancreas with mildly surrounding hyperechoic mesentery and prominent lymph nodes – The pancreatic changes are most consistent with mild 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.

- Two mixed echogenicity, hypoechoic (possibly cystic) lesions visualized in the liver – These could represent abscesses, mixed echogenic cystic lesions, less likely masses, etc.

- Small volume free abdominal fluid and hyperechoic mesentery – Most consistent with inflammation/infection.

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

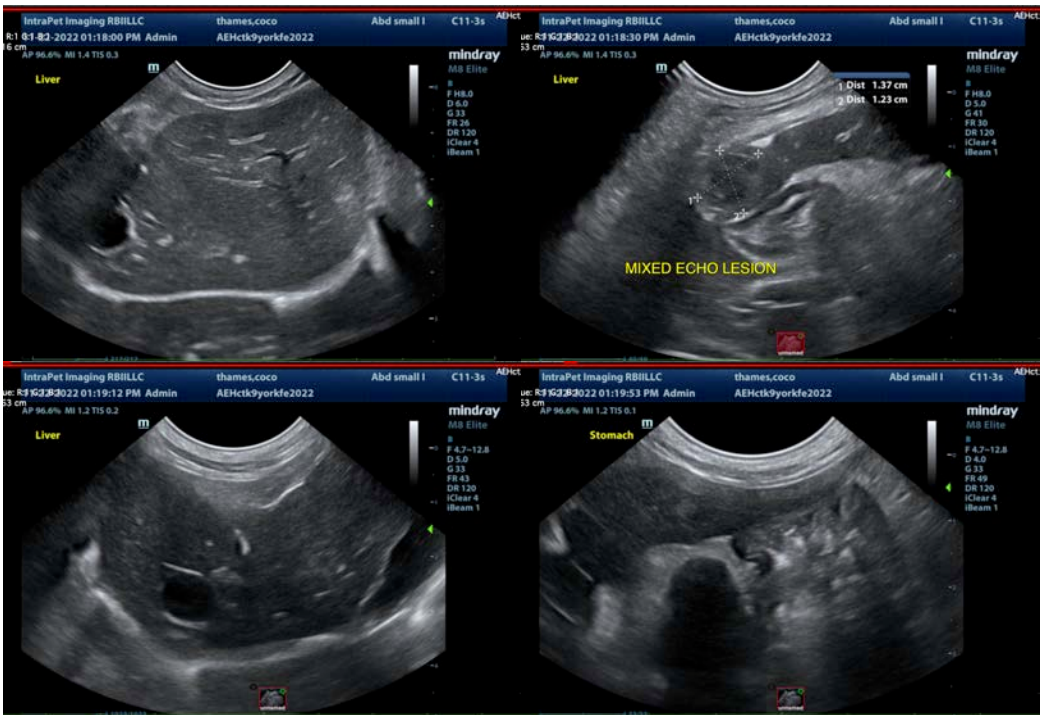
There are two mixed echogenicity, hypoechoic lesions visualized within the hepatic parenchyma. They do not appear to significantly color flow and are concerning for mixed echogenic cystic lesions/abscesses, given the

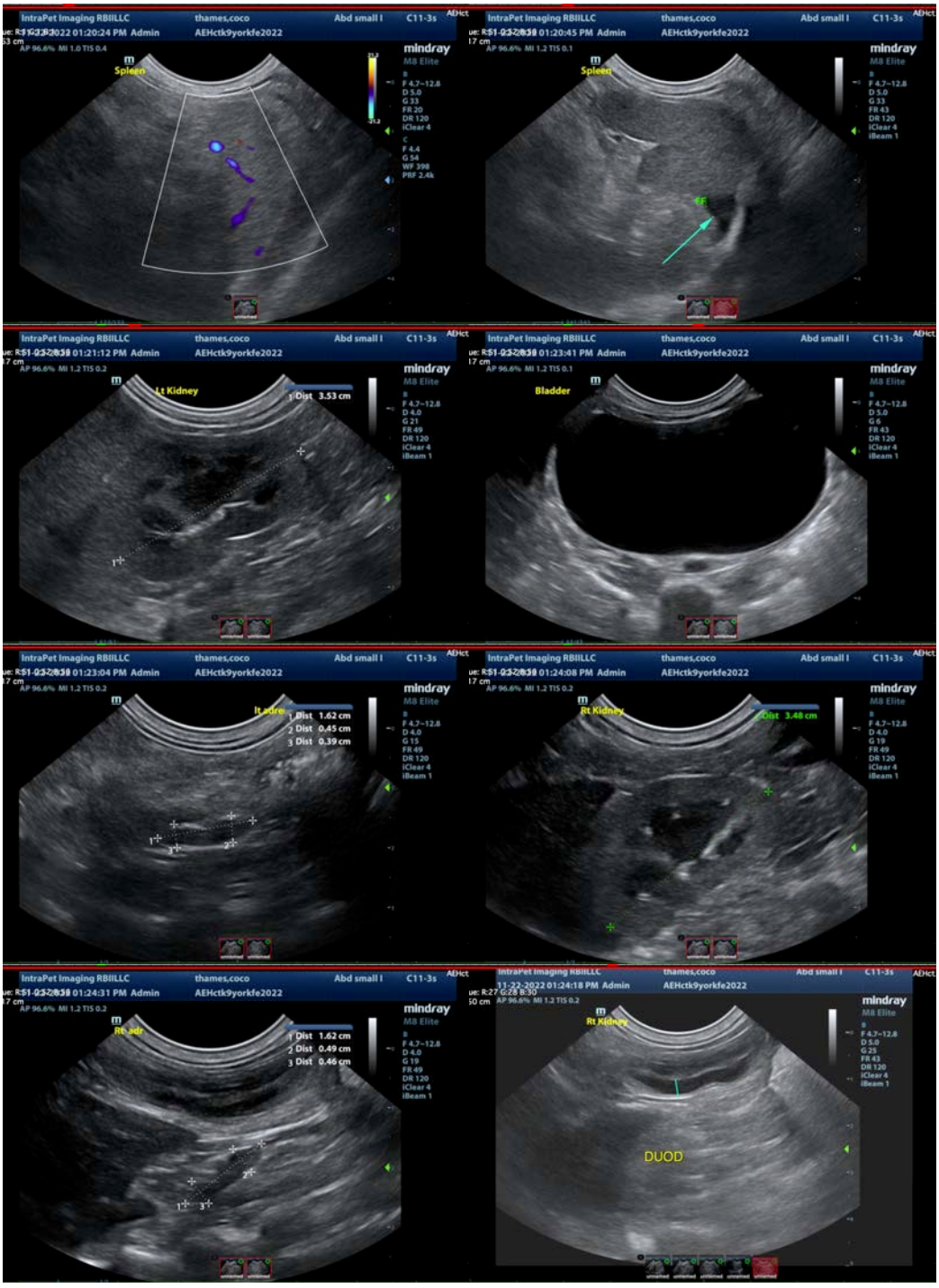
regional inflammation, but neoplasia cannot be 100% ruled out. Additionally, the pancreas is somewhat prominent with prominent lymph nodes and surrounding inflammation. Strongly recommend a fine needle aspirate of the liver, ideally of one of the lesions if they can be reached. Consider cytology and possible an anaerobic and aerobic culture from and aspirate if possible. Ideally, this would be treated based on culture and sensitivity results. Consider a blood culture, if cultures are not possible, then consider antimicrobial therapy with a broad-spectrum antibiotic in addition to antibiotics that would be appropriate for anaerobic microbes (Metronidazole, Clindamycin plus a fluroquinolone etc.).

Additionally, you could consider a contrast CT scan of these lesions to try and obtain more information and determine if surgical intervention is warranted. Recommend reevaluation of these lesions in 2-4 weeks (sooner if not doing well), and if the patient seems to be responding to antimicrobial therapy, continue it until ultrasound reevaluation, as long-term therapy may be indicated (until lesions resolve). Additionally, recommend probiotic therapy during any antibiotic treatment. If the lesions are not improving or the patient is not doing well surgical intervention may be needed.

The pancreas appears somewhat prominent and inflamed, and there are some regional mesenteric lymph nodes that are enlarged. Recommend concurrent treatment for pancreatitis with pain medication, nausea medications, etc., correlation with quantitative cPLI level, and continued monitoring. This could be a result of regional inflammation from the liver as well.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

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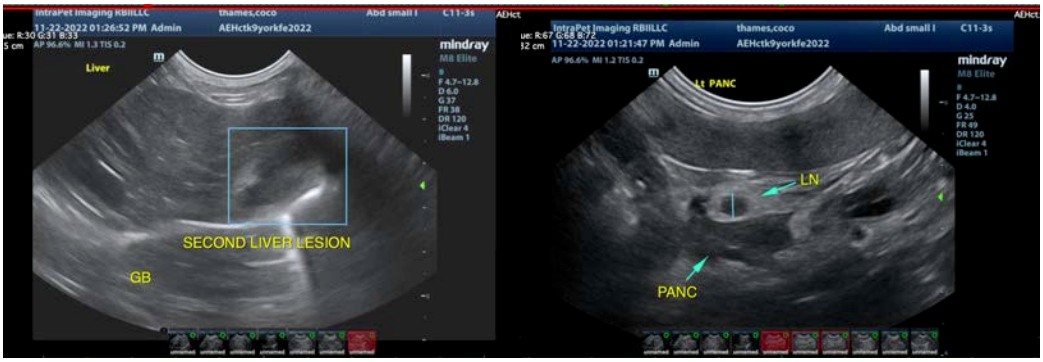

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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