IMAGING PERFORMED BY

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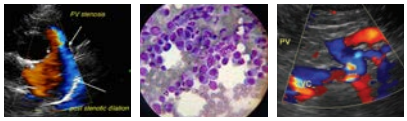

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DATE

2/2/23

PATIENT

Poe Whitman

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

2/12/12

WEIGHT

8.62 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Everhart Vet Hospital

REFERRING VET

Dr. Menefee

INVOICE

44719

PRESENTING CLINICAL SIGNS

Pt presented for annual wellness in early December. Pt has weight loss and icterus on exam. Senior labs showed liver elevations. Started on clavamox and metronidazole. Now pt has decreased appetite, lethargy and continued weight loss

Current Medications: clavamox x 2 weeks, metronidazole x 2 weeks
Lab Results: ALP and ALT elevations.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
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 (4.0 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 (4.58 cm) with a small nephrolith visualized. 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, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.36 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 0.43 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 normal/borderline large, and hypoechoic with scalloped edges. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is large in size, and hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. 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 prominent and somewhat thickened, measuring at 0.26 cm. Luminal contents are mild and primarily anechoic. While no overt bile duct enlargement is noted, the proximal bile duct appears to have somewhat thickened wall and is prominent at 0.28 cm.

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 uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Jejunum wall measures 0.25 cm. Duodenum wall measures 0.37 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 mottled 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 a small amount of free fluid, particularly near the liver. There are prominent mesenteric lymph nodes measuring 0.37 cm and 0.31 cm. The omentum is diffusely hyperechoic.

ULTRASONOGRAPHIC FINDINGS

- Borderline large, hypoechoic spleen – Findings could be consistent with congestion, infiltrative disease, sedation, etc. Consider a fine needle aspirate of the spleen.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Large, hypoechoic, heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. Infiltrative or inflammatory/infectious disease is thought less likely.
- Thickened gallbladder wall – Findings are most consistent with cholecystitis or infiltrative disease/edema.
- Mildly thickened small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Small volume free abdominal fluid

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

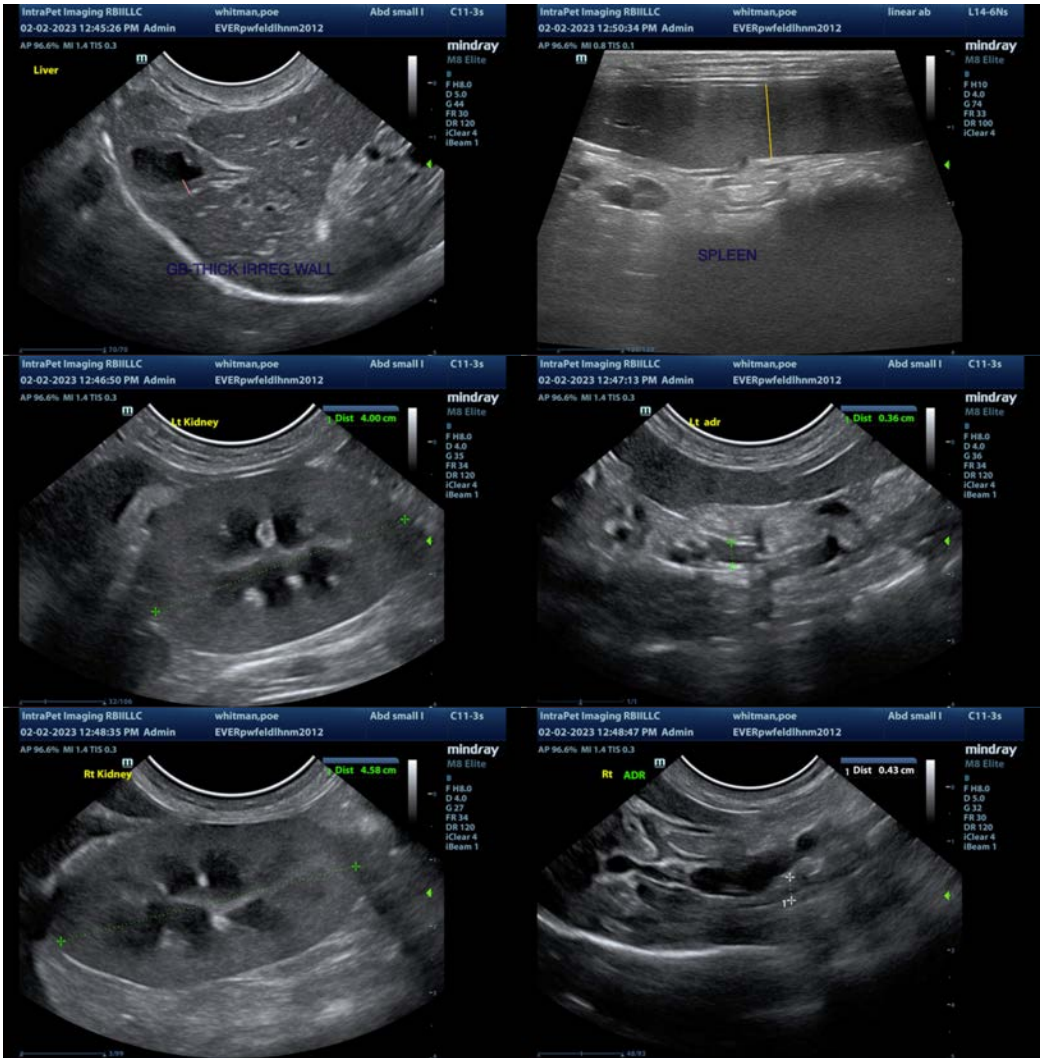
The combination of the large hypoechoic liver and pancreas as well as the thickened gallbladder wall is concerning for cholangiohepatitis or possibly infiltrative neoplasia. Based on the lack of response to antibiotics, I would strongly recommend a fine needle aspirate of the liver and spleen (provided coagulation

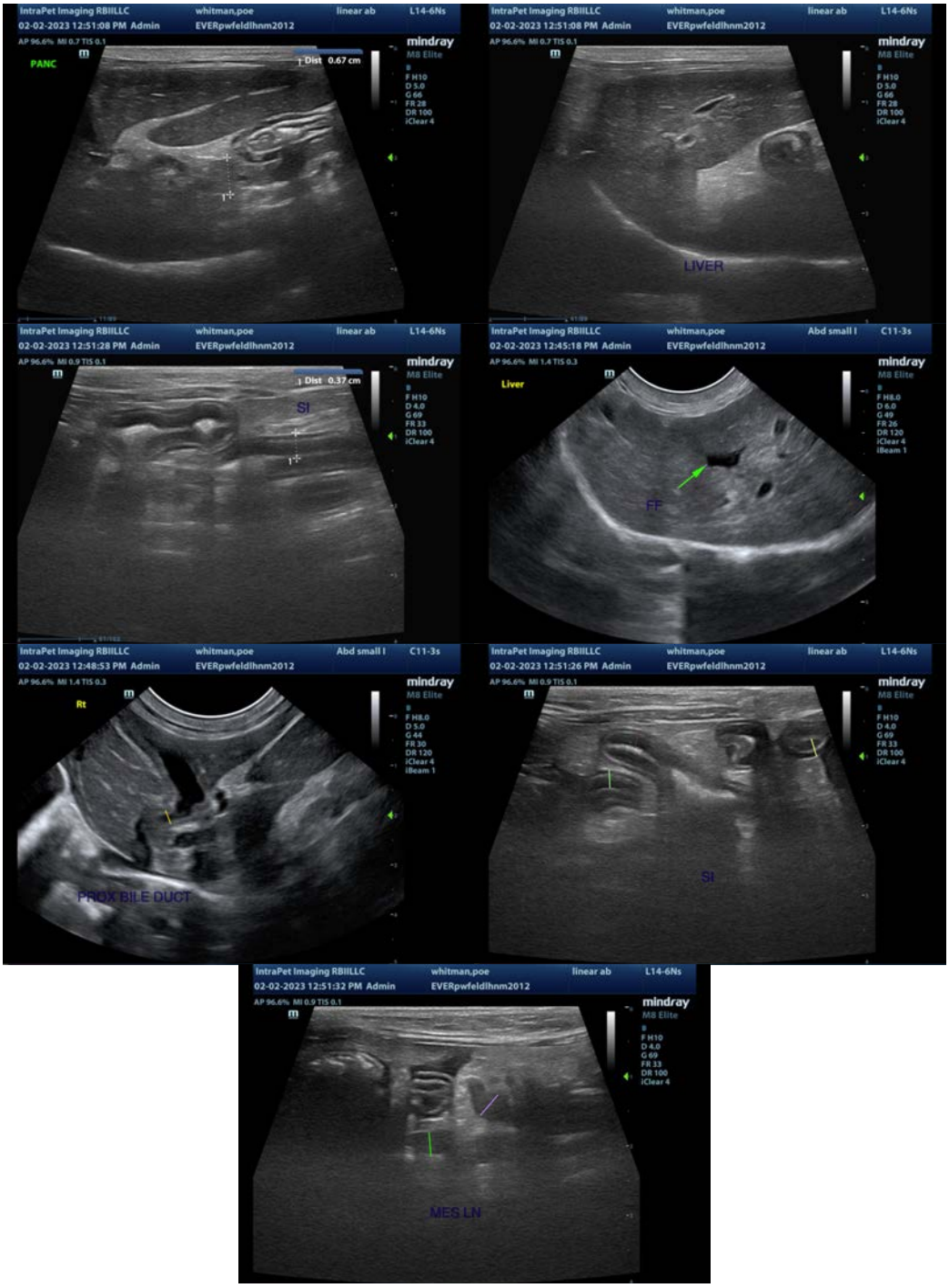
parameters are normal), looking for possible round cell neoplasia.

If there is no evidence of neoplastic change, then consider screening for toxoplasmosis and possibly a liver biopsy. If biopsy is not possible, anti-inflammatory steroids, Ursodiol, and antibiotics could be considered (provided the owner knows the risks of empirical treatment).

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

The changes visualized in the pancreas and small intestine could be secondary to edema from the small amount of free fluid present or could be due to true inflammatory type change. Correlate with clinical signs and if GI signs are present. If so, additional workup for small intestinal and pancreatic disease could be considered.

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MES 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.

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