IMAGING PERFORMED BY

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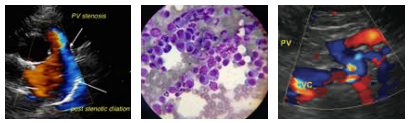

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DATE
10/15/21

PATIENT
Jojo Zylstra

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Neutered male

AGE
9/16/17

WEIGHT
11.18 lbs

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

HOSPITAL NAME
Northwind AH

REFERRING VET
Dr. Repsher

INVOICE
92398

PRESENTING CLINICAL SIGNS

History: Last week owner changed food from Purina One urinary to Blue Buffalo. Patient started vomiting and stopped eating - has not eaten anything in 2hr. Seen @ PetEr- BW showed mild elevation in Bilirubin. Treated w/sq fluids and Cerenia. Patient would only ear small handfuls of food at recheck today p is icteric Bili is elevated.
Current Medications: started on IV fluids LRS 25ml/hr. Clavamox started, Cerenia IV 0.5cc, Mirtazapine 1/4 of 7.5mg.
Lab Results: Attached separately.
Radiographs: Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Sedation not required for scan.
Stat Report: STAT report 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 (4.24 cm). Overall echogenicity is normal with adequate 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 (4.22 cm). Overall echogenicity is normal with adequate 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, 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 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 gallbladder 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 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. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (0.21 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 as compared to the surrounding isoechoic mesentery. The pancreatic duct measured 0.17 cm. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Prominent mesenteric lymph nodes were visualized and measured 0.58 cm and 0.92 cm. The omentum is of normal uniform echogenicity.

Heart

A brief view of the heart was submitted. No pericardial effusion was seen.

Thorax

The thoracic pleura appeared somewhat irregular and nodular in areas with ring down artifact noted. I recommend three view thoracic radiographs with radiologist interpretation.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Pancreas prominent, moderate. The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Heterogenous liver. Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.
- 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:

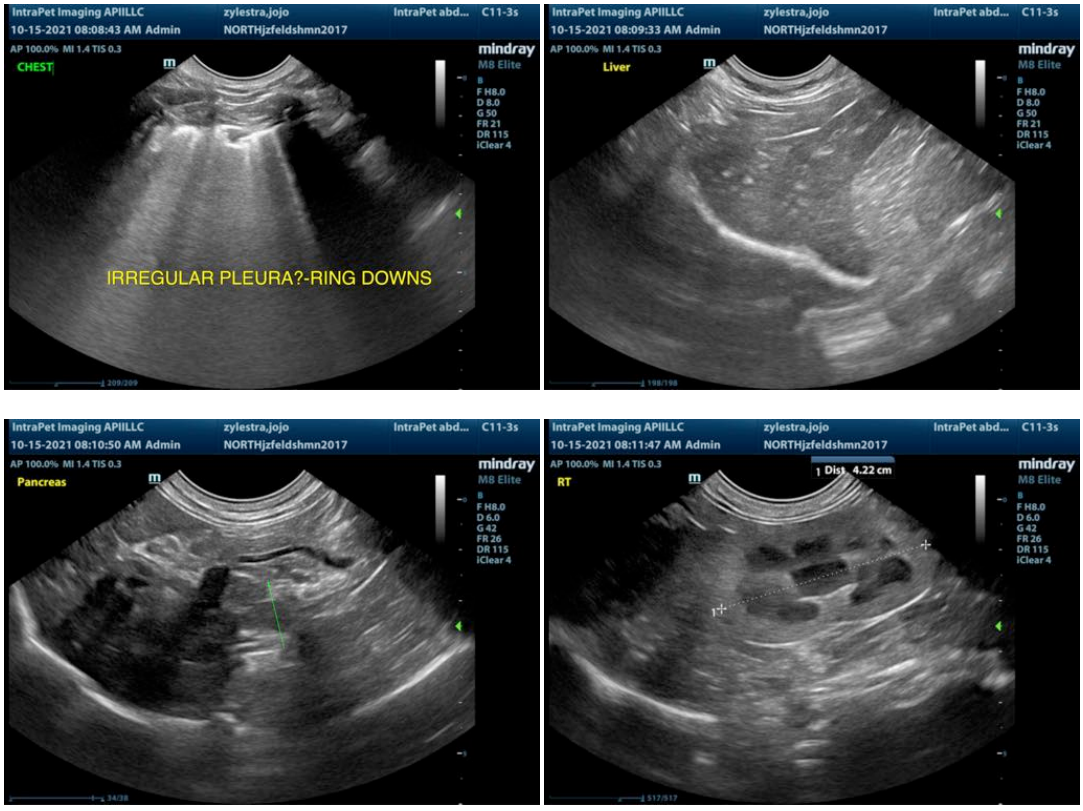
- Subjectively thoracic pleura with ring down artifact (can be an indicator of parenchymal disease).

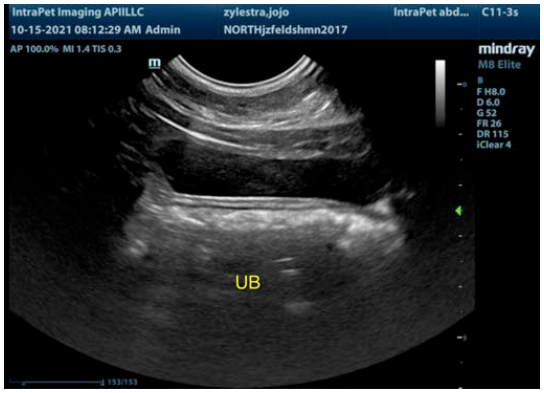
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

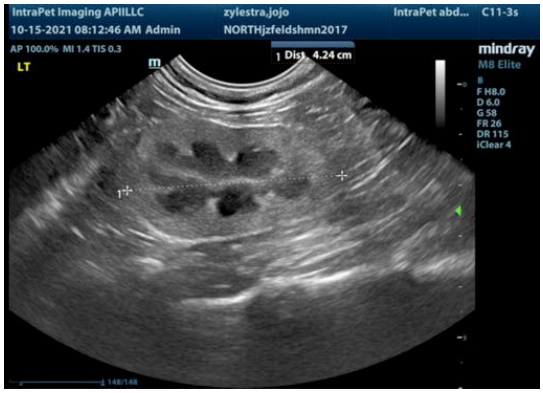
The ultrasonographic changes are relatively mild and non-specific. It is unusual to have such an elevated bilirubin with a normal ALT and ALP so confirm that the patient is not anemic and that this does not represent hemolysis. Consider a FNA of the liver to evaluate for hepatic causes of icterus. No lesions were visualized associated with the biliary tract.

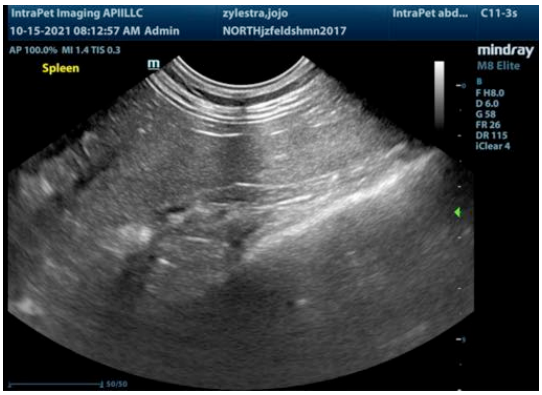
The pancreas is somewhat prominent, but does not appear overtly inflamed. Consider a GI panel with quantitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and the GI tract. Consider a feeding tube placement if the patient does not start eating shortly to aid with nutritional supplementation and medications. Consider liver and GI biopsies if FNA is not helpful and the patient continues to deteriorate.

Additionally there is the suggestion of irregular pleura (almost nodular) and ring downs that can be an indicator of pulmonary parenchymal disease. The brief view of the thorax submitted did not reveal obvious abnormalities, but I recommend full evaluation and interpretation by a veterinarian radiologist.









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.

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