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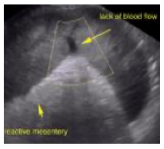
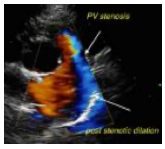
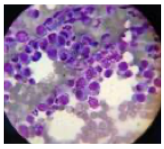
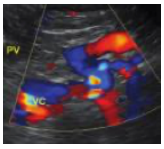

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1-800-838-4268 info@sonopath.com

PATIENT

Ella Nelson

SPECIES

Canine

BREED

Labrador Retr

SEX

Spayed Female

AGE

10 years

WEIGHT

58.5 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Aaron Deml, DVM

HOSPITAL NAME

Craig Road AH

REFERRING VET

Emilee Larkin, DVM

INVOICE

12803

DATE

4.21.23.23

PRESENTING CLINICAL SIGNS

History: Medical History: P is a 10-year, 1 month old FS lab presenting for lethargy, vomiting and weakness. O states that P started having intermittent soft stool over the last 8 days. She had multiple episodes in the house which she has never had. Then night before last P started vomiting and has vomited multiple times since then. P has mostly been at her normal energy level until today when she became lethargic. P has mostly been eating. She has gotten intermittent Rimadyl when she seemed painful in her hind end. O also gave 4mg ondansetron PO for 2 days and it did seem to help with the vomiting. Eating, drinking, and urinating within normal limits. No coughing or sneezing noted by owner. No known allergies to vaccines/ medication. Patient is not on any medications or supplements. P has no recent travel history.

Physical Exam: T - 104.6 F P - 120 bpm R - 130 brpm/panting
ATTITUDE- quiet, alert, responsive BW - 58.5 lbs BCS - 6/9 MM - pink, tacky, CRT 2 sec, 5% dehydration
EENT- no nasal or ocular discharge OU; fundic exam not performed; no inflammation, erythema or discharge AU; TM not assessed AU; no other significant findings
ORAL- evidence of mild dental calculus; no masses or lesions on oral exam PLNS - peripheral LNs are normal in size and not firm or painful H/L - normal sinus rhythm, no murmurs auscultated, pulses strong and synchronous; eupneic; no evidence of increased respiratory rate or effort, bronchovesicular sounds are normal; no crackles or wheezes auscultated
ABD - tense, non-painful, no palpable masses or organomegaly UG - moderate sized bladder; no discharge or irritation; no mammary masses MSI - ambulatory x 4; stiff gait in hind end; moderately decreased ROM in both hips; no crepitus or fractures; complete orthopedic exam not performed INT - nice hair coat, no evidence of ectoparasites, no abnormal findings
NEURO - stiff gait and quiet mentation, CPs intact x 4; CNs normal; no obvious deficits; full neurologic exam not performed Pain Score (0-4) - 0 Rectal Exam: not performed Diagnostics performed today: Radiographs - no obvious abnormalities

Abnormal PE/Chem/CBC/UA Results: Elevated AST: 84 (15-66) Elevated ALT: 491 (12-118) Elevated ALP: 825 (5-131) Elevated GGT: 14 (1-12) Hypercholesterolemia: 336 (92-324) Neutrophilia: 12814 (2060-10600)

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone is normal.

The left kidney is normal in size (5.77 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal in size (6.70 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size (0.56 cm at cranial pole) (0.45 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

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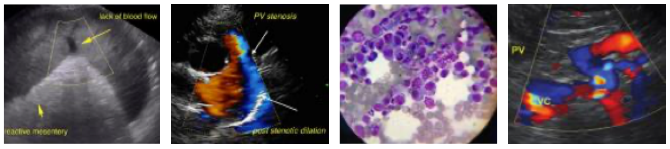

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The right adrenal gland is in normal size (0.39 cm at cranial pole) (0.52 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen
The spleen is normal in size (approximately 2.00 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver
The liver is subjectively normal in size. On the right side, there is slight irregularity to the peripheral contours. The remaining margins are smooth/curvilinear. The parenchyma is hypoechoic relative to the spleen and slightly mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The mesentery effacing the serosal surface of the right caudal aspect is hyperechoic.

The gall bladder is moderately distended. The wall is normal to slightly thickened (up to 0.32 cm), hyperechoic in some regions and slightly irregular. A scant amount of suspended echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The lumen is mildly distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas
The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen
The mesentery in the cranial and midabdomen is mildly hyperechoic. Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The hepatic parenchymal changes, in conjunction with the elevated liver values could be consistent with infection/inflammatory disease (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic hepatitis), hepatotoxicosis (i.e., copper) infiltrative neoplasia, fibrosis, other hepatopathy.
- The gall bladder changes could be consistent with mild cholecytitis and/or benign age-related hyperplasia.
- Peritonitis, the cause of which is unclear. Considerations include inflammatory hepatopathy, low-grade pancreatitis, other.

Secondary Findings

- Mild bilateral chronic renal changes with subtle dystrophic mineralization

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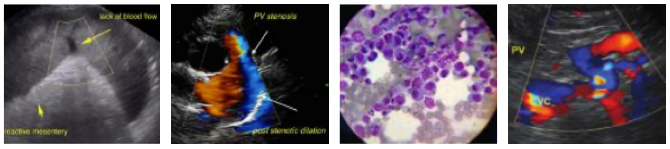

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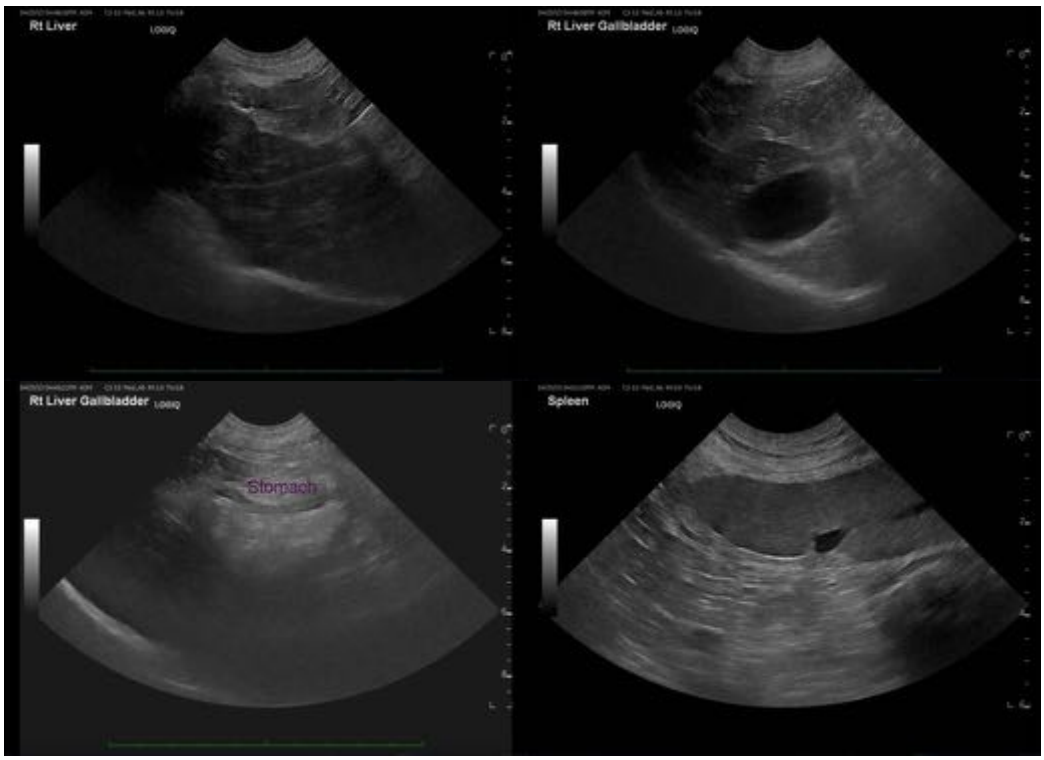
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider a fine-needle aspirate of the abdominal fluid (if clotting status is appropriate). The fluid should be submitted for cytologic evaluation.
- Leptospirosis testing (i.e., blood and urine PCR, serology) is also recommended.
- Also consider pre-and postprandial serum bile acids and hepatic tissue sampling (i.e., fine-needle aspirate or biopsies (i.e., laparoscopic, or surgical)). If biopsies are pursued, aerobic and anaerobic bile cultures should be obtained, and additional hepatic tissue samples should be acquired for potential copper quantitation. Given the GI signs, also consider obtaining GI biopsies at the time of surgery. Clotting times should be assessed prior to any tissue sampling, and three-view thoracic radiographs should be performed prior to anesthesia to assess cardiopulmonary status.
- While awaiting test results consider empirical treatment for bacterial cholangiohepatitis/Leptospirosis (i.e., amoxicillin-clavulanic acid, hepatic antioxidants) and other supportive measures.
- To further evaluate for underlying pancreatitis, consider a cPLI.
- Give the history of a fever, a urine culture/ensitivity is also recommended (preferably on a pre-antibiotic sample).
- If the fever persists and the above diagnostics are inconclusive, a more comprehensive work-up for a fever of unknown origin may be warranted.



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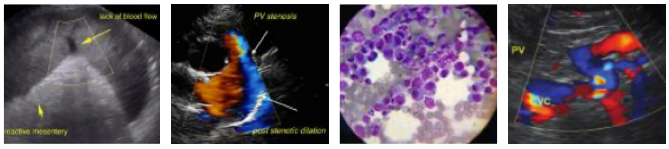

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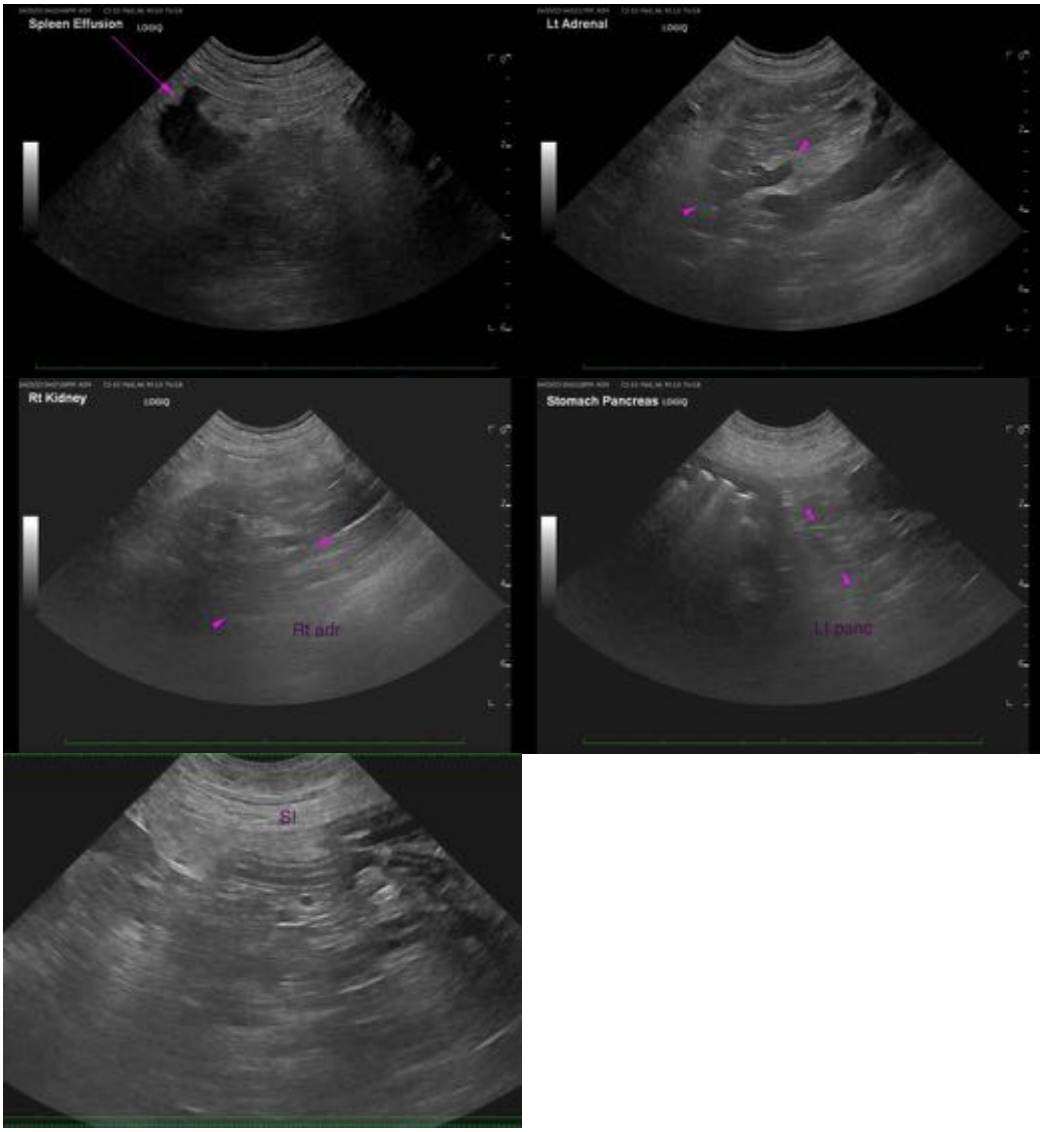

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.
Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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