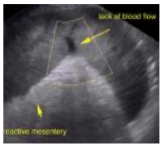
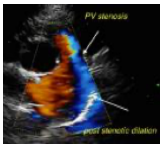
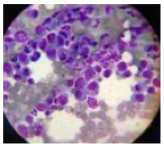
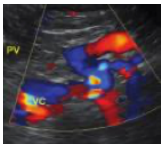
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Lacee Lu Enders

SPECIES
Canine

BREED
Maltese

SEX
Spayed Female

AGE
12 years

WEIGHT
8 lbs

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

IMAGING PERFORMED BY
Christina Sitton

HOSPITAL NAME
Sherwood Family PC

REFERRING VET
Christina Sitton

INVOICE
13739

DATE
7.19.23

PRESENTING CLINICAL SIGNS

History: weight loss (planned per O) AUS elected d/t liver/GGT elevations (see below)

Abnormal PE/Chem/CBC/UA Results: Chemistry ALT 323 (18-121) ALP 366 (5-160) GGT 19 (0-13) Lipase 379 (0-250) CK 292 (10-200) T4 1.6 (1-4) FT4 wnl CBC Platelet 647 (143-448) UA USG 1.018 pH 6.5 glucose, bilirubin, ketones, blood, bacteria, crystals negative trace protein

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended. A 0.30 cm focal thickening of the wall is observed at the dorsoapical aspect. The remaining wall is normal in thickness with a smooth mucosal surface. A small amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

The left kidney is normal in size (3.58 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. Hyperechoic shadowing diverticular foci are visualized. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, infarcts or hydroureter.

The right kidney is normal in size (4.16 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. Pinpoint hyperechoic foci are observed within the cortex. Hyperechoic shadowing diverticular foci are visualized. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal in size (0.42 cm at cranial pole) (0.46 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.

The right adrenal gland is in normal size (0.51 cm at cranial pole) (0.51 cm at caudal pole) with a slightly irregular 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 (1.15 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.

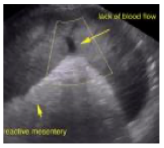
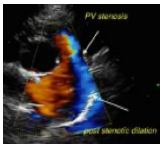
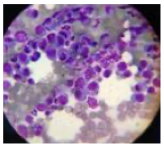
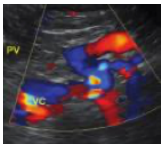
Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric

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outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness 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 peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonspecific diffuse hepatopathy. Differentials include inflammatory disease (i.e., chronic hepatitis, bacterial cholangiohepatitis), hepatotoxicosis (i.e., copper), Leptospirosis, infiltrative neoplasia (less likely), vacuolar hepatopathy, other hepatopathy.

Secondary Findings

- Minor bilateral chronic renal changes with subtle dystrophic mineralization.
- The small, focal thickening of the urinary bladder wall may represent an emerging polyp, tumor, granuloma, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider pre-and postprandial serum bile acids to assess hepatic function.
- Also consider Leptospirosis testing (i.e., blood and urine PCR, serology), particularly if the patient's liver enzyme elevations are acute in nature.
- Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If cytologic evaluation is inconclusive, consider a surgical liver biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for copper quantitation.
- If a more conservative approach is desired, consider empirical treatment for cholangiohepatitis with amoxicillin-clavulanic acid along with hepatic antioxidants. If liver values do not begin to improve within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If values do improve, a 4–6-week course of treatment is recommended.
- Regarding the proteinuria, consider a UPC.
- Given the weight loss, three-view thoracic radiographs are also recommended to assess for pathology in the chest.

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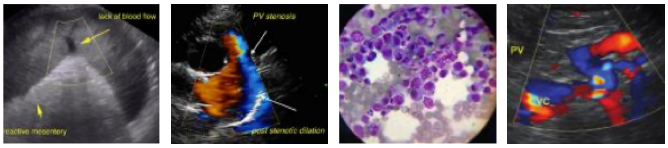

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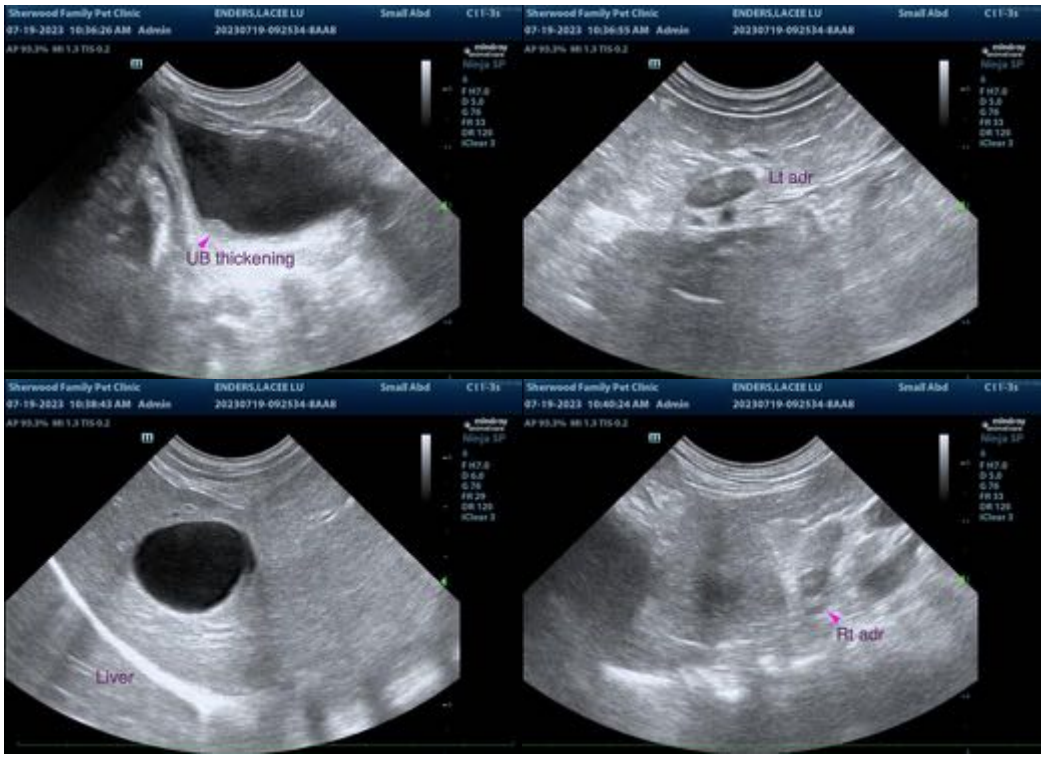

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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