**DATE PRESENTING CLINICAL SIGNS**

2/3/2022

History: Pet presented on 12/2020 for annual wellness, senior lab work showed elevated ALT 1196, started on Denamarin (owner did have a difficulty administering). Recheck lab work in August of 2021 - no change to ALT. Pet is non-clinical.

PATIENT

Ichabod Woods

Current Medications: Denamarin Advance - 1 tablet every 24 hours, Purina ProPlan UR - Urinary.

Lab Results: Elevated ALT. 12/2020 - ALT 1196. 08/2021 - ALT 1193. Attached separately.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SPECIES

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Feline

Imaging Performed By: Stephanie Pearce RDCS, RVT.

BREED

Additional History: Urine Specific Gravity 1.047 with trace proteinuria and inactive sediment

DSH

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX****Urinary System**

Neutered Male

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth.

The bladder is moderately distended. A scant amount of suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

AGE

3-28-2013

The left kidney is normal size (3.69 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

9.22 Lbs

The right kidney is normal size (3.99 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

Andrea Nicastro, DMV,
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(Small Animal
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Adrenal Glands

The left adrenal gland is normal size (0.44 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Everhart Veterinary
Center

The right adrenal gland is normal size (0.33 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Menefee

Spleen

The spleen is normal in size (0.70 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.

INVOICE

10273

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is of appropriate echogenicity and echotexture. No focal lesions are observed. Several intrahepatic biliary stones are visualized. Hepatic vasculature is of normal volume with no evidence of congestion.

The gall bladder lumen is mildly to moderately distended. The wall is slightly thickened (0.12 cm). A small amount of echogenic to mineralized debris is observed within the lumen. The cystic and common bile ducts are normal.

Gastrointestinal

The gastric lumen is mildly to moderately distended with ingesta and soft shadowing material. The gastric wall and pylorus are 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 ileocecolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb is visible with normal curvilinear peripheral contours. The parenchyma is slightly hypoechoic relative to surrounding omental fat. No focal lesions are observed. The pancreatic duct is visible but not overtly dilated (0.17 cm in diameter).

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. A 0.50 cm colic lymph node is visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

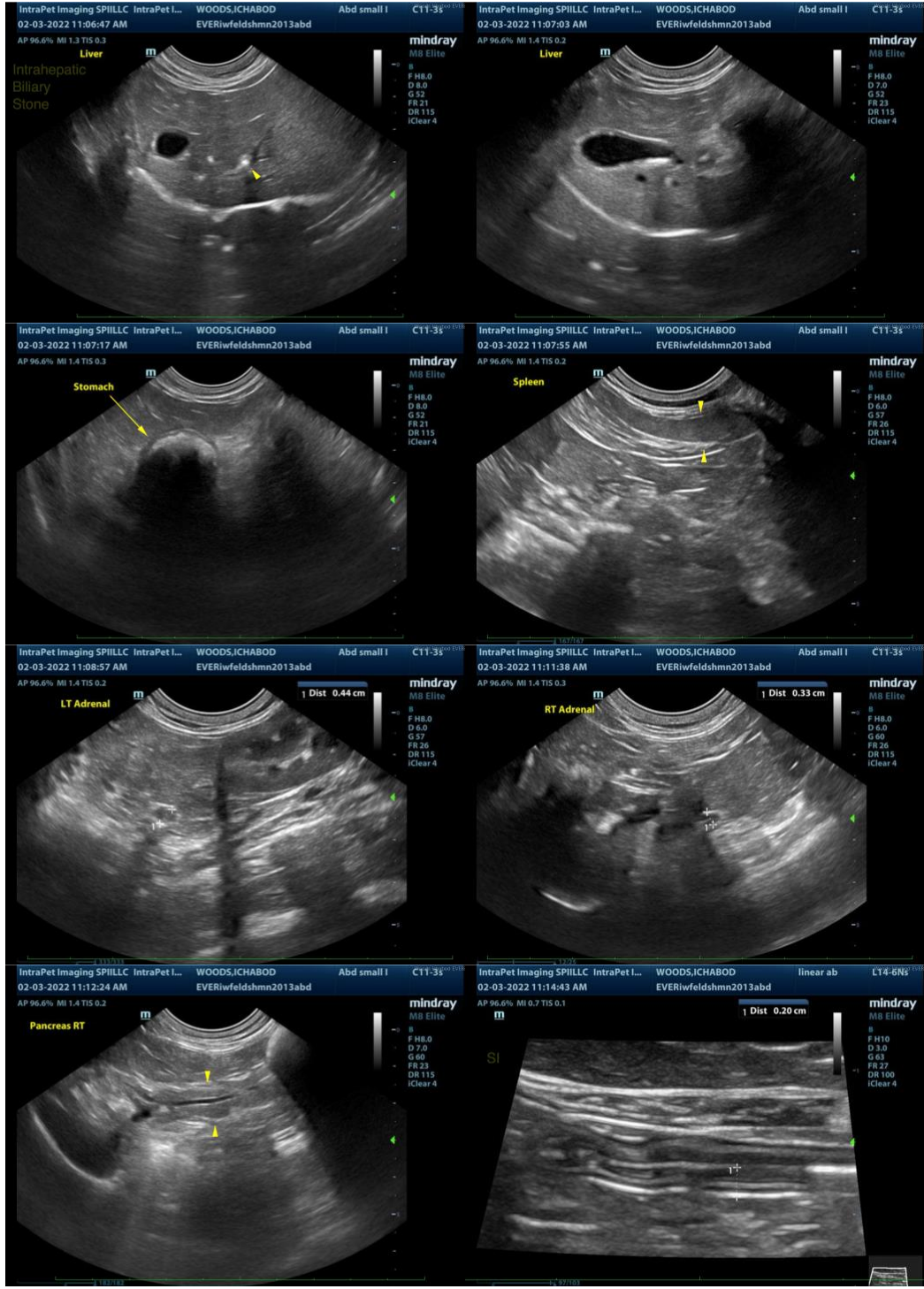
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, lymphoplasmacytic hepatitis, hepatic lipidosis, infiltrative neoplasia (less likely)) cannot be excluded. Intrahepatic biliary stones, incidental.

Secondary Findings

- The pancreatic changes may be a normal variant for this patient or could be consistent with mild, chronic pancreatitis. Correlation with clinical findings is recommended.
- The shadowing material within the lumen may represent normal ingesta and/or foreign material (i.e., hair).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Ideally, a surgical liver biopsy with aerobic and anaerobic cultures would be performed to get a definitive diagnosis. Alternatively, a fine-needle aspirate can be considered (if clotting status is appropriate). It should be noted that cytology results may not be representative of a diffuse hepatopathy.
- If medical management is preferred, consider empirical treatment for bacterial cholangiohepatitis (i.e., broad-spectrum antibiotic therapy). If no improvement in the patient's ALT is seen within 5-7 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling revisited.





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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