

**DATE PRESENTING CLINICAL SIGNS**

9/30/21

History: Presented on 09/24 for 3 episodes of vomiting. PE: unremarkable; ALT >4000; Snap CPL normal; Hx heartworm disease. Referred to ER for care and fluid therapy, discharged on 09/26. 9/28 presented for recheck, PE wnl, doing well at home no vomiting/diarrhea and normal appetite/energy.

PATIENT

Cheza Meyerl

Current Medications: Started 9/26: Denamarin Advanced 120mg 1 PO SID, Clavamox 250mg 1 PO BID x 1 week, Metronidazole 250mg 1 PO BID x 1 week. Started 9/13: Doxycycline 200mg 1 PO BID x 4 weeks, Prednisone 10mg 1 PO SID.

SPECIES

Canine

Lab Results: (9/24)- ALT 4643, AlkP 924; (9/28)- ALT 3052, AlkP 815, GGT 122, AST 236, T. bili 0.6.

BREED

Labrador Retriever

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SEX

Female Spayed

Sedation: Dexdomitor and Butorphanol administered prior to scan.

Stat Report: STAT report not requested by the veterinarian.

AGE

7/29/19

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly distended with anechoic urine. 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.

WEIGHT

42.5 lbs.

The left kidney is normal size (6.49 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomodullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (6.69 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomodullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

INTERPRETED BY

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

HOSPITAL NAME

Perry Hall Animal
Hospital

Adrenal Glands

The left adrenal gland is normal size (0.45 cm at cranial pole) (0.44 cm at caudal pole) (2.79 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Baer

The right adrenal gland is normal size (0.73 cm at cranial pole) (0.69 cm at caudal pole) (2.74 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

11934kk

Spleen

The spleen is normal in size (2.10 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 with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of stranding echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is moderately distended with fluid and 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. No obstructive disease is noted.

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

**An obvious cause for the patient's elevated liver enzymes is not identified in this study. Considerations include infection (i.e., leptospirosis, bacterial cholangiohepatitis), hepatotoxicity (i.e., false dark mussel ingestion, sago palm), infiltrative neoplasia (less likely), and other hepatopathy. A congenital portosystemic shunt is possible, but the clinical presentation does not quite fit with this differential.

- The gastric luminal contents may represent stasis or recent meal/water ingestion.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Leptospirosis testing (i.e., blood and urine PCR, serology) is recommended.
2. Also consider a fine needle aspirate of the liver (if clotting status is appropriate). A 25-gauge needle should be used.
3. Continued supportive care for cholangiohepatitis/Leptospirosis is recommended while awaiting test results. Antioxidant therapy (i.e., Denamarin +/- Ursodiol) should also be considered. If liver values do not continue to improve and cytologic evaluation is inconclusive, a surgical liver biopsy with aerobic and anaerobic bile cultures +/- acquisition of additional hepatic tissue samples for potential copper quantitation should be considered.
4. Given the history of vomiting, three-view thoracic radiographs are also recommended to assess for evidence of aspiration pneumonia.





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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com