

**DATE PRESENTING CLINICAL SIGNS**

9.28.22 Admitted for surgery and had a high ALT.

PATIENT

Nestor Coleman

Current Medications: Denamarin Advanced Lg dog chew 1 SID started 9/21/22. Cephalexin 500mg 2 BID started 9/21/22.

Lab Results: ALT 469.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SPECIES

Canine

BREED

Coonhound

SEX

Neutered Male

AGE

3/31/2012

WEIGHT

74.4 lbs

INTERPRETED BY

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(Small Animal
Internal Medicine)

HOSPITAL NAME

Taylorville
Veterinary Clinic

REFERRING VET

Dr. Earp

INVOICE

11730

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately 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.

The **prostate** is normal in size (1.40 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The **left kidney** is normal size (7.68 cm in length); with a slightly irregular shape. A 2.17 cm cortical cyst is observed at the craniomedial aspect. The cyst causes slight capsular expansion. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (6.91 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 hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.55 cm at cranial pole) (0.61 cm at caudal pole) (3.17 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.

The **right adrenal gland** is normal size (0.58 cm at cranial pole) (0.65 cm at caudal pole) (3.26 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.

Spleen

The **spleen** is normal in size (2.24 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

Liver

The **liver** is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and subtly 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 **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small amount of partially dependent to suspended debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **gastric lumen** is not distended. 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 right limb of the **pancreas** is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

There is no evidence of free fluid. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Based on the clinical history and sonographic changes, a diffuse hepatopathy is suspected. Top differentials include inflammatory disease (i.e., bacterial cholangiohepatitis, chronic active hepatitis), hepatotoxicosis (i.e., copper), Leptospirosis, or infiltrative neoplasia (less likely).

Secondary Findings

- The splenic parenchymal changes trend toward the benign (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, splenitis, antigenic stimulation). However, emerging neoplasia (i.e., round cell tumor) cannot be completely excluded.
- Age-related pancreatic remodeling with fibrosis. Mild chronic pancreatitis is also possible, particularly if the patient's clinical history is consistent with this diagnosis.
- Left renal cyst – incidental

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider Leptospirosis testing (i.e., blood and urine PCR, serology), particularly if the clinical suspicion for this disease is high.

Also consider hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy) if clotting status is appropriate. Surgical biopsies are more likely to yield a definitive diagnosis. If pursued, aerobic and anaerobic bile cultures as well as acquisition of additional hepatic tissue samples for potential copper quantitation should be considered. Three-view thoracic radiographs are recommended prior to any anesthetic event.

If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, +/-metronidazole, Denamarin). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.





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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