

**DATE PRESENTING CLINICAL SIGNS**

11/12/21 History: Patient started shaking in discomfort 3 days ago and Blood work showed concerning numbers.

PATIENT

Lab Results: ALT 1114, ALP 233, BUN 45, Crea 1.9. Severely elevated precision PSL. CBC unremarkable. T4 low.

Kramer Giles

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: declined.

SPECIES

Canine

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

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

The bladder lumen is moderately distended with mostly 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.

Cocker Spaniel X

SEX

Neutered Male

The prostate is normal in size (0.90 cm) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

AGE

4/16/05

The left kidney presented small size (3.25 cm in length) with slightly irregular shape. The cortex is variably thickened and there is moderate loss of corticomedullary distinction. Several nephroliths are visualized.

Moderate pyelectasia is present (0.44 cm in longitudinal plane) A 0.78 cm cortical cyst is observed at the craniolateral aspect. The cyst contains some echogenic debris. Several small cortical cysts are also seen.

There is no evidence of hydroureter.

WEIGHT

22 Pounds

The right kidney presented small size (3.72 cm in length) with normal shape and smooth peripheral contours. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction.

Several nephroliths are visualized. There is no evidence of pyelectasia or hydroureter.

INTERPRETED BY

Andrea Nicastro, DMV,
Diplomate DACVIM
(Small Animal
Internal Medicine)

Adrenal Glands

The left adrenal gland is normal size (0.58 cm at cranial pole) (0.56 cm at caudal pole) (2.05 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.

HOSPITAL NAME

Padonia Vet Hospital

The region of the right adrenal gland is evaluated. No obvious pathology is observed.

REFERRING VET**Spleen**

Dr. Youssef

The spleen is normal in size (1.14 cm) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

INVOICE

29797

Liver

The liver is normal to slightly small in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and relatively homogeneous 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 normal in thickness. A moderate to large amount of aggregated echogenic suspended sludge is observed within the lumen. 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 small intestinal lumen is not dilated. The small intestinal wall thickness is normal (xxx cm) with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative 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

- Excessive gall bladder sludge – Differentials include early mucocele formation, cholestasis secondary to fasting (less likely).
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, fibrosis, infiltrative neoplasia (less likely)) should be considered.
- Bilateral nephropathy with non-obstructive nephrolithiasis and left pyelectasia

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

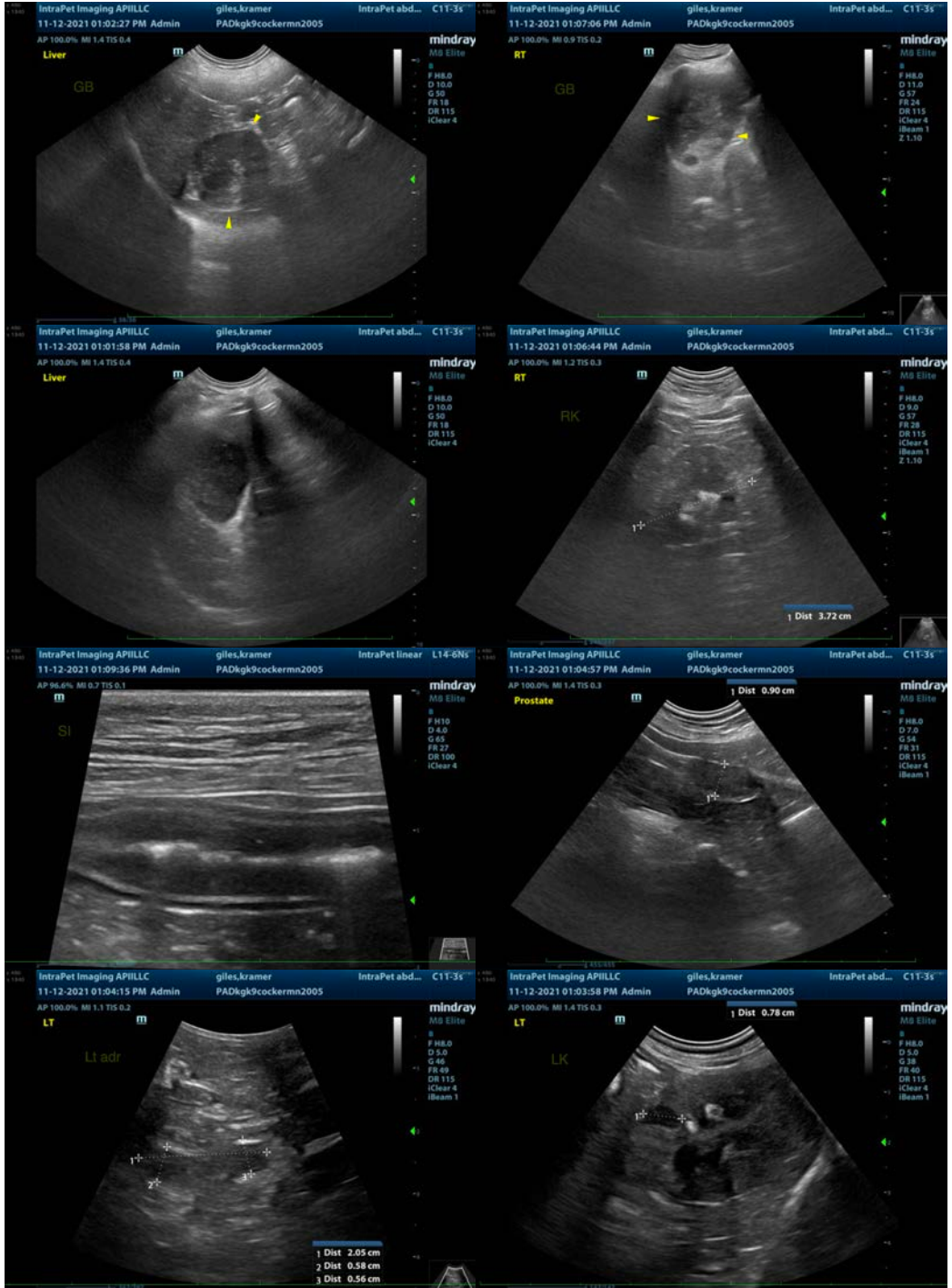
Given the patient's age, consider starting with a conservative approach (i.e., empirical treatment for bacterial cholangiohepatitis with Amoxicillin, Clavulanic acid, +/- Metronidazole, Denamarin). If no improvement is seen in the liver values within 5-7 days of initiating therapy, consider hepatic tissue sampling (i.e., fine needle aspirate or surgical biopsy). If surgery is pursued, aerobic and anaerobic bile cultures, acquisition of additional hepatic samples for potential copper quantitation and assessment of the gallbladder for mucocele formation is recommended.

Three-view thoracic radiographs should be performed prior to anesthesia to evaluate cardiopulmonary status.

Also consider Leptospirosis testing (i.e, blood and urine PCR, serology).

Given the gallbladder changes, also consider initiation of Ursodiol therapy.

Given the renal changes, a urine culture and sensitivity, UPC (if proteinuria is present), and a baseline blood pressure measurement are recommended.



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 DACVIM (Small Animal Internal Medicine)
info@SonoPath.com