

**DATE PRESENTING CLINICAL SIGNS**

8.12.2022 Hx of liver enzyme elevation at prev vet- this has resolved. Renal values have been gradually increasing. Hx of resistant urinary tract infections.

**PATIENT**

Callie Criado

Current Medications: Meloxicam 3.75mg SID, Gabapentin 300mg BID, Ursodiol 500mg SID, Vit B 1 SID, Denamarin 2 SID, Vit E 100 IU 1 SID, Fortiflora SID, Amoxi-Clav 500mg BID started 8/1/22.

Lab Results: SDMA 19 (0-14), Creat 2.2 (0.5-1.5), BUN 42 (9-31). UA: Collection method- free catch. Color- yellow, clarity- cloudy, SG 1.03, Glucose negative, bilirubin negative, Ketones negative, Blood trace, pH 5.5, Protein 3+, Urobilinogen normal, WBC 20-30, RBC 6-10, bacteria marked >40/hpf, rods and cocci present. Epi cell 2\_ (3-5)/hpf, mucus- none seen, casts- none seen. Urine culture Prelim- Isolate 1: E.Coli >100,000 CFR per mL Susceptibility to follow. Platelet decreased 143-448. Platelets appear markedly decreased on the blood film (10,000-30,000 per microliter). Platelets are clumped on the blood film. Large platelets present.

**SPECIES**

Canine

**BREED**

Mixed

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SEX**

Spayed Female

Imaging Performed By: Andi Parkinson, BS, RDMS.

**AGE**

12/28/2010

**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.

**WEIGHT**

97.1 lbs

The **left kidney** is normal size (6.08 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**INTERPRETED BY**

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

The **right kidney** is normal size (5.95 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. A 1.49 cm cortical cyst is observed at the cranial aspect. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter.

**HOSPITAL NAME**

Timonium Animal  
Hospital

**Adrenal Glands**

The **left adrenal gland** is normal size (0.61 cm at cranial pole) (0.74 cm at caudal pole) (3.48 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. Brand

The **right adrenal gland** is normal size (0.63 cm at cranial pole) (0.68 cm at caudal pole) (2.62 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**

11399

**Spleen**

The **spleen** is normal in size (2.36 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 curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature 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 **gastric lumen** is mildly distended soft, shadowing material. 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 obvious evidence of an obstructive pattern.

### **Pancreas**

The right limb of the **pancreas** is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is borderline dilated (0.36 cm in diameter). There is no evidence of peripancreatic 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**

- Bilateral age-related degenerative renal changes with a right cortical cyst

### **Secondary Findings**

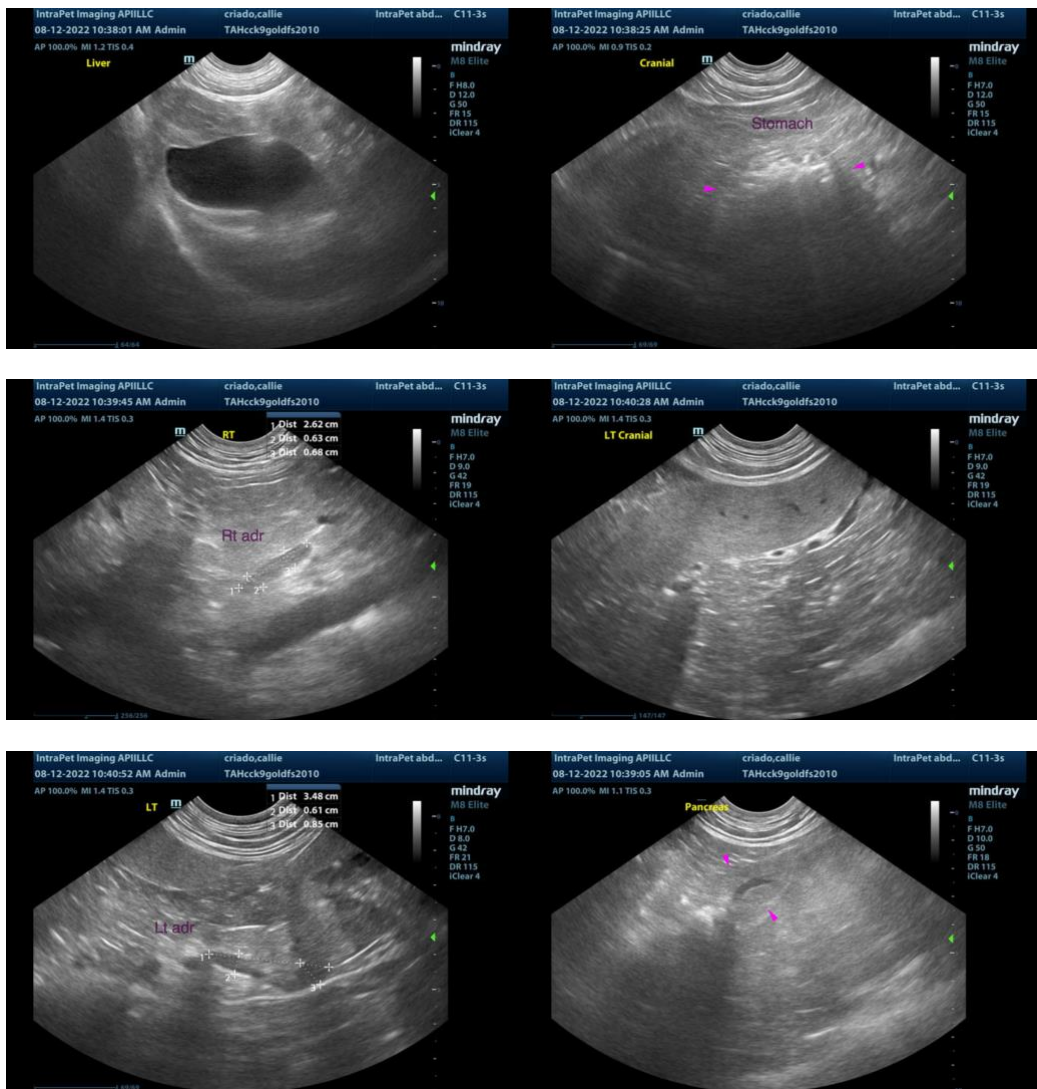
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The pancreatic changes are suggestive of pancreatic remodeling with questionable chronic or prior pancreatitis.
- The soft shadowing material within the gastric lumen may represent normal ingesta and/or foreign material (i.e., grass).

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

1. Given the azotemia and proteinuria, a UPC should be considered once the infection has cleared (if proteinuria is still present).
  2. A baseline blood pressure measurement is recommended.
  3. Transition to a prescription renal diet is also recommended.
- Consider a prolonged antibiotics course (i.e., 3-4 weeks) based on urine culture and sensitivity results. Depending on these culture and sensitivity results, a fluoroquinolone may be beneficial, as

this class of antibiotics has good renal tissue penetration. A urine culture and sensitivity is recommended 5-7 days after the last dose of antibiotics.

- Consider a resting cortisol level to screen for hypoadrenocorticism.
- Regarding the possible thrombocytopenia, serial monitoring of the platelet count is recommended to determine if this is a true finding versus artifact due to platelet clumping.
- Given the patient's age, three-view thoracic radiographs are recommended to assess cardiopulmonary status, particularly if fluid therapy is to be initiated at any point.



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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