

**DATE**

2/27/23

**PATIENT**

Gracie Morgan

**SPECIES**

Canine

**BREED**

Jack Russell mix

**SEX**

Female, spayed

**AGE**

2/26/2014

**WEIGHT**

15.9 lbs.

**INTERPRETED BY**

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

**HOSPITAL NAME**

Animal Emergency  
 Hospital

**REFERRING VET**

Dr. King

**INVOICE**

14636

**PRESENTING CLINICAL SIGNS**

Wed into Thursday-- started to be uncomfortable, squealing, will not lay down Thursday, RDVM did lab work and radiographs. 2/23 RBC 48 BUN-113 Creat 2.3 Phos 7.5 bili 2.3- IVF and buprenex given. Home at night, did defecate and then urinated, owner brought sample in to RDVM. Urine showed rods and started on Baytril, Gaba. IVF on Friday with RDVM 2/24 RBC 38, SDMA 26, Creat 2.4, BUN 92, Phos 7.9, Bili <0.1 Sat to Sunday, still uncomfortable and not laying down, crying Is eating and drinking.

Current Medications: Clavamox, Trazodone, Methocarbamol, Gabapentin, Fentanyl, Buprenorphine, Cerenia.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**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 distended. A small to moderate amount of suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The left kidney is normal size (4.87 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Mild pyelectasia is present (0.23 cm in the transverse plane). There is no evidence of infarcts or hydroureter.

The right kidney is normal size (5.27 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is mildly enlarged (0.43 cm at cranial pole) (0.63 cm at caudal pole) (1.55 cm in length) with a prominent caudal pole. The glandular echogenicity and detail are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is borderline enlarged (1.16 cm at cranial pole) (0.57 cm at caudal pole) (1.78 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 (1.53 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 prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic to slightly hypoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and 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 moderate amount of mostly gravity-

dependent echogenic debris 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 pyloric outflow tract is patent. 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**

### **Primary Findings:**

- Bilateral chronic renal changes with mild left pyelectasia.

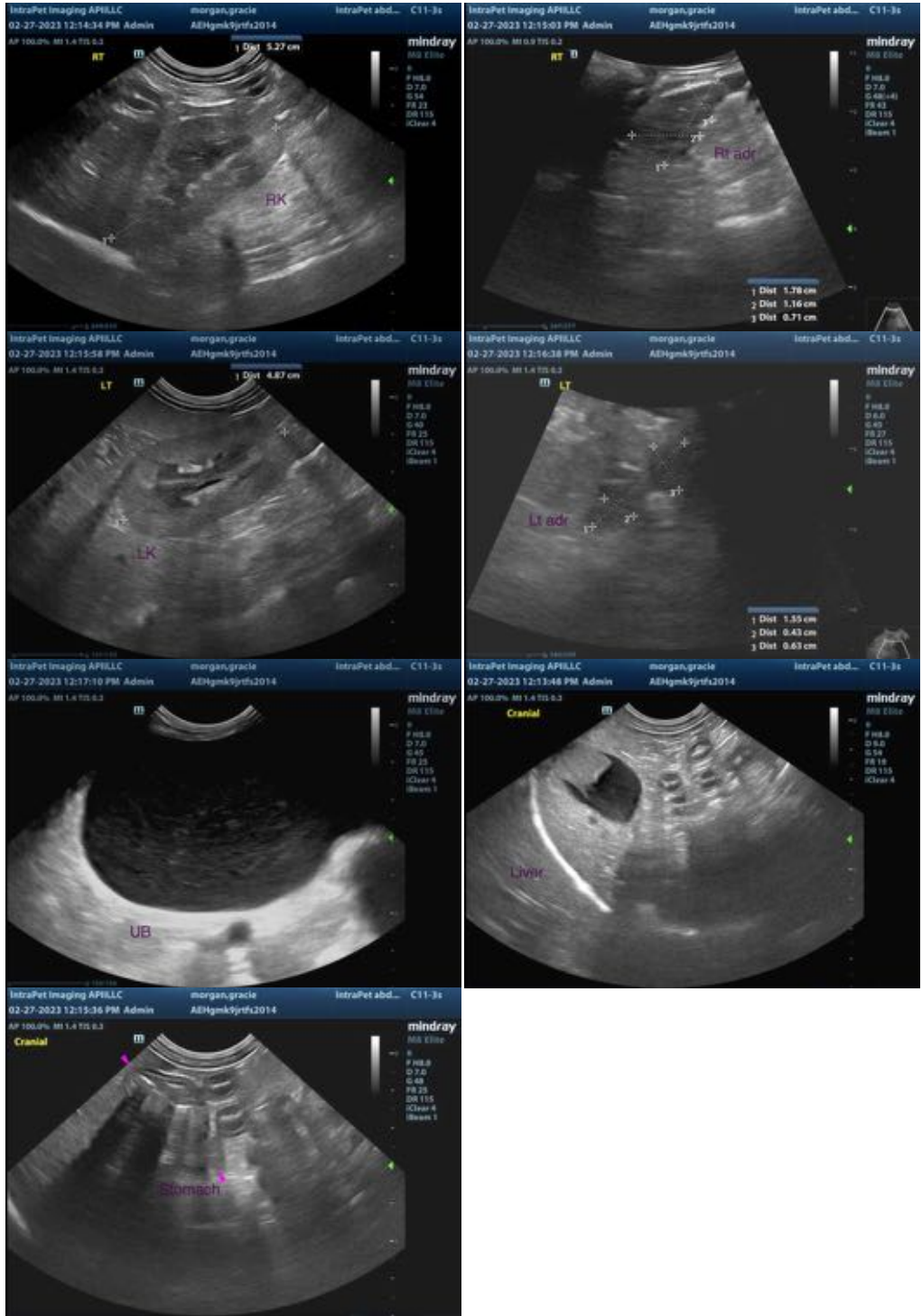
### **Secondary Findings:**

- Mild bilateral adrenomegaly.
- Suspected benign diffuse hepatopathy. Vacuolar hepatopathy (i.e., endocrine, idiopathic) is suspected with a lower possibility of a more insidious hepatic pathology.

\*It is unclear whether the patient's discomfort is secondary to underlying renal disease (i.e., pyelonephritis) or if a concurrent problem (i.e., orthopedic neurologic, other) is present.

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

- Regarding the azotemia, consider the following:
  1. Urinalysis with culture and sensitivity
  2. Baseline blood pressure measurement
  3. UPC (if proteinuria is present in the absence of infection)
  4. Fluid therapy and symptomatic care
- Also consider orthopedic and neurologic examinations to assess for non-metabolic causes of pain. Spinal +/- other bony radiographs may also be warranted.



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.

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