

**DATE PRESENTING CLINICAL SIGNS**

5/4/23

**PATIENT**

History: P presented on 04/27/23 for increased urinary accidents in the house, dark urine color, and possible urinary incontinence. P was the runt of the litter per O. Significantly elevated renal values with no known toxicity. PE: QAR, BCS 3/9, H/L clear, urine color slightly dark

Teddee Young

**SPECIES**

Current Medications: Clavamox and Carporfen started on April 27th, but stopped on April 30th.

Lab Results: BUN 125, Cr. 6.2, K+ 6.0, SDMA > 60.0, HCT 29%, Absolute retics. 69,300

Radiographs: apparently enlarged left kidney on x-ray, otherwise rads unremarkable

Date of Previous IntraPet Ultrasound: No previous.

Canine

Sedation: Not required to complete full diagnostic ultrasound.

**BREED**

Stat Report: STAT requested.

Imaging Performed By: Rachel Brillhart, RDMS.

Standard Poodle

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

Intact Male

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

**AGE**

The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portions of the proximal urethra are normal.

3/25/22

**WEIGHT**

The prostate is mildly enlarged (1.78 cm in width) with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly heterogenous in appearance. No focal lesions are observed. The prostatic urethra is not overtly dilated.

31.6 Pounds

The left kidney is small in size (4.91 cm in length); with completely mineralized parenchyma. The mineralization causes minimal visibility of the renal parenchyma.

**INTERPRETED BY**

The right kidney is small in size (4.83 cm in length); with completely mineralized parenchyma. The mineralization causes minimal visibility of the renal parenchyma.

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

**Adrenal Glands**

The left adrenal gland is normal size (0.54 cm at cranial pole) (0.59 cm at caudal pole) (1.60 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**

Everhart VH

**REFERRING VET**

Dr. DelFavero

The right adrenal gland is normal size (0.74 cm at cranial pole) (0.57 cm at caudal pole) (1.70 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**

22300

**Spleen**

The spleen is normal in size (1.03 cm) 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 portal vein to caudal vena cava ratio is approximately 1:1.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of echogenic debris is observed within the lumen, most of which is gravity dependent, and some of which is suspended. The cystic and common bile ducts are normal.

### ***Gastrointestinal***

The gastric lumen is moderately fluid distended and hypomotile. The gastric wall is diffusely thickened (up to 0.75 cm) with questionable retention of the 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 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.

### ***Lymph Nodes***

The abdominal lymph nodes are normal/not visible.

### ***Other***

The testicles are subjectively normal in size (left testicle measures 1.67 cm x 1.09 cm, right testicle measures 1.70 cm x 1.04 cm) and symmetrical with homogenous parenchyma.

## **ULTRASONOGRAPHIC FINDINGS**

- Bilateral renal calcification, the cause of which is unclear. Considerations include prior toxicity (i.e., ethylene glycol), congenital abnormality, other. There is no visibly normal renal parenchyma.
- The gastric wall thickening could be consistent with gastritis (i.e., uremic) or less likely, emerging neoplasia. Functional ileus is suspected.
- The prostate changes are as expected for a young intact male.

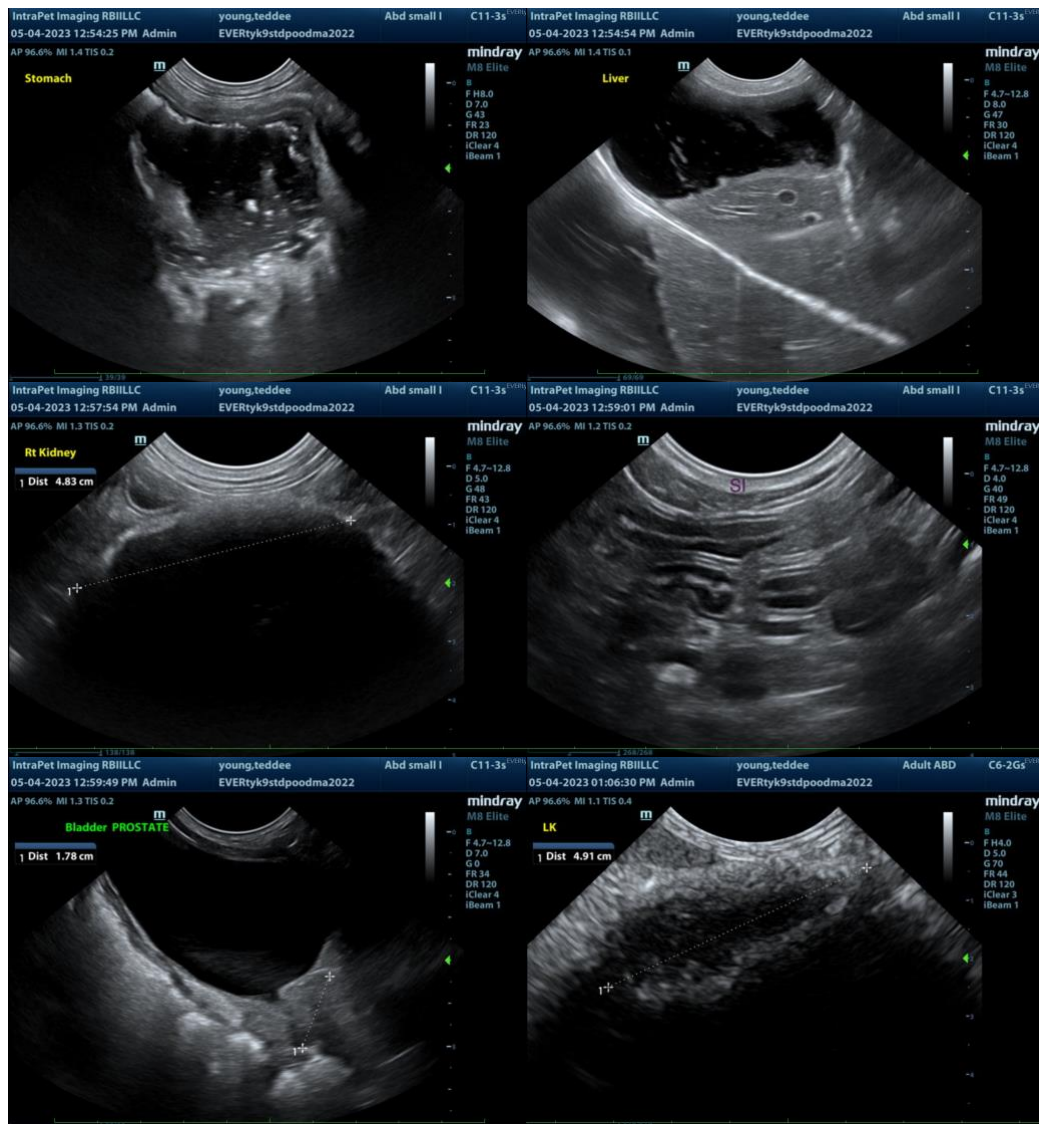
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

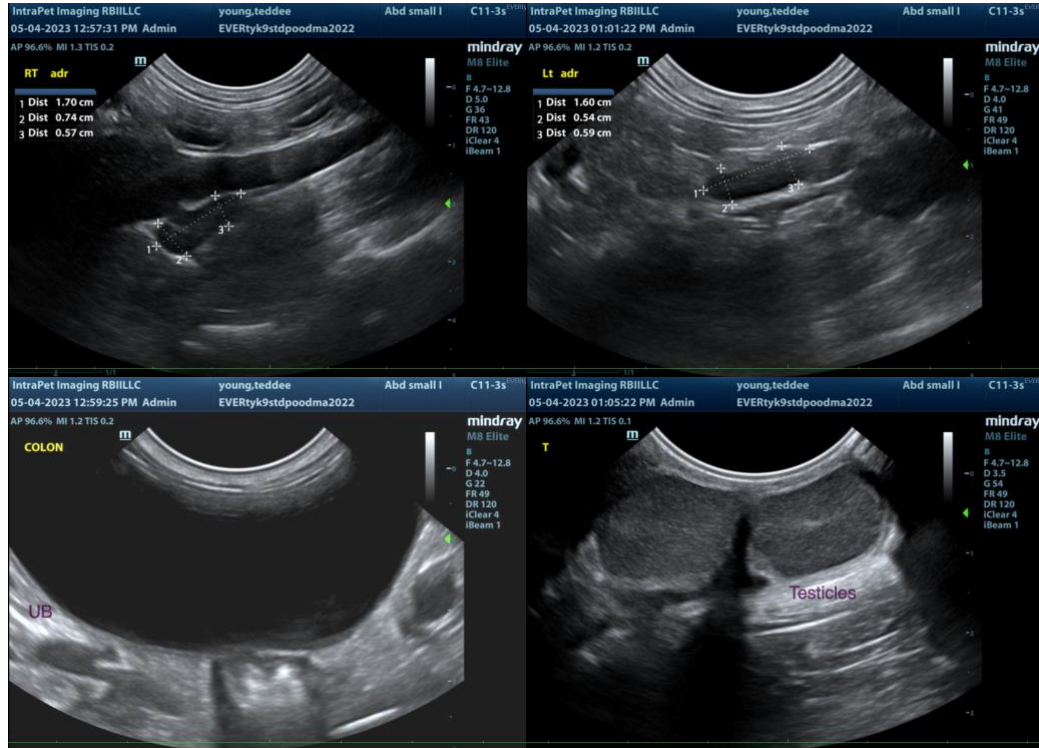
Given the azotemia, consider the following:

- Urine culture and sensitivity
- UPC, if proteinuria is present in the absence of infection

- Baseline blood pressure measurement
- IV fluid diuresis, broad spectrum antibiotic therapy (while awaiting urine culture and sensitivity results), and other supportive measures.
- Serial monitoring of the patients renal values is recommended to assess for progression of the azotemia.

Given the sonographic appearance of the kidneys and the severity of the azotemia, the long-term prognosis for this patient is considered guarded.





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, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)  
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