
**PATIENT**

Toro Lord

**PRESENTING CLINICAL SIGNS**
**SPECIES**

Canine

History: Has past history of some type of stones- o cannot recall if ureteral or urinary. Has been on dissolution diet since then. Significant azotemia noted on pre dental bloodwork. Urinalysis pending. Would like to rule out neoplasia in kidneys or ureteral stones as possible causes of azotemia

**BREED**

Chihuahua

Abnormal PE/Chem/CBC/UA Results: CBC wnl besides mild elevation platelets 598 (148-484) pct elevated at 68% (14-46) CHEM wnl besides sdma elevated 26 (0-14) creat elevated 198 (44-159) urea elevated 30.8 (2.5-9.6) amylase elevated 2481 (500-1500) lipase elevated 1906 (200-1800) TT4 wnl UA received: free catch- usg 1.019, ph 7 500mg/dl protein neg glu/ket 25ery/ul blood <1 wbc/hpf <1 rbc/hpf suspect cocci no casts/crystals

**SEX**

Neutered Male

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
**AGE**

13 years

**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 anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 1-2 cm, are normal.

**WEIGHT**

2.85 lbs

The prostate is not definitively visualized due to its pelvic location.

**INTERPRETED BY**

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

The left kidney is normal size (3.02 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Several nonobstructive nephroliths are visualized. Trace pyelectasia is present (0.11 cm in the transverse plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

**IMAGING PERFORMED BY**

Laura Field/Brian Barnes

The right kidney is normal size (3.26 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Several nonobstructive nephrolith are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

**HOSPITAL NAME**

Westview VH

**Adrenal Glands**

The left adrenal gland is upper limits of normal size (0.43 cm at cranial pole) (0.55 cm at caudal pole) (1.42 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. Laura Field

The right adrenal gland is normal size (1.09 cm at cranial pole) (0.42 cm at caudal pole); 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**

10929

**Spleen**

The spleen is normal in size (0.84 cm in width at the level of the hilus) with a normal capsular contour. A light micronodular pattern is observed throughout the parenchyma. No focal lesions are observed. Splenic vasculature is normal.

**DATE**

5/18/22

### ***Liver***

The liver is subjectively prominent in size with swollen 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 lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic, gravity dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The gastric lumen is minimally fluid-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. 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**

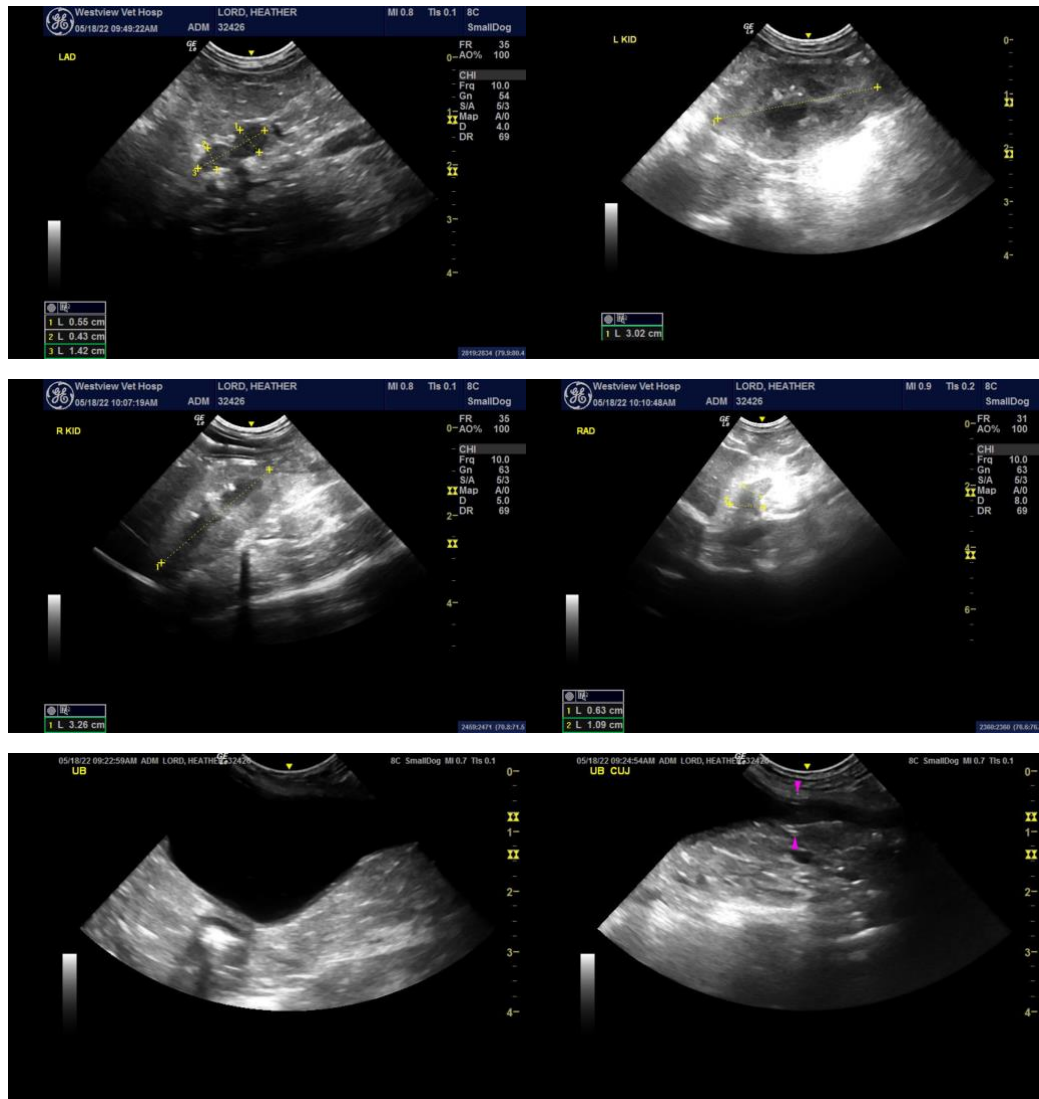
- Bilateral, nonspecific, chronic renal changes with nonobstructive nephrolithiasis and left pyelectasia.

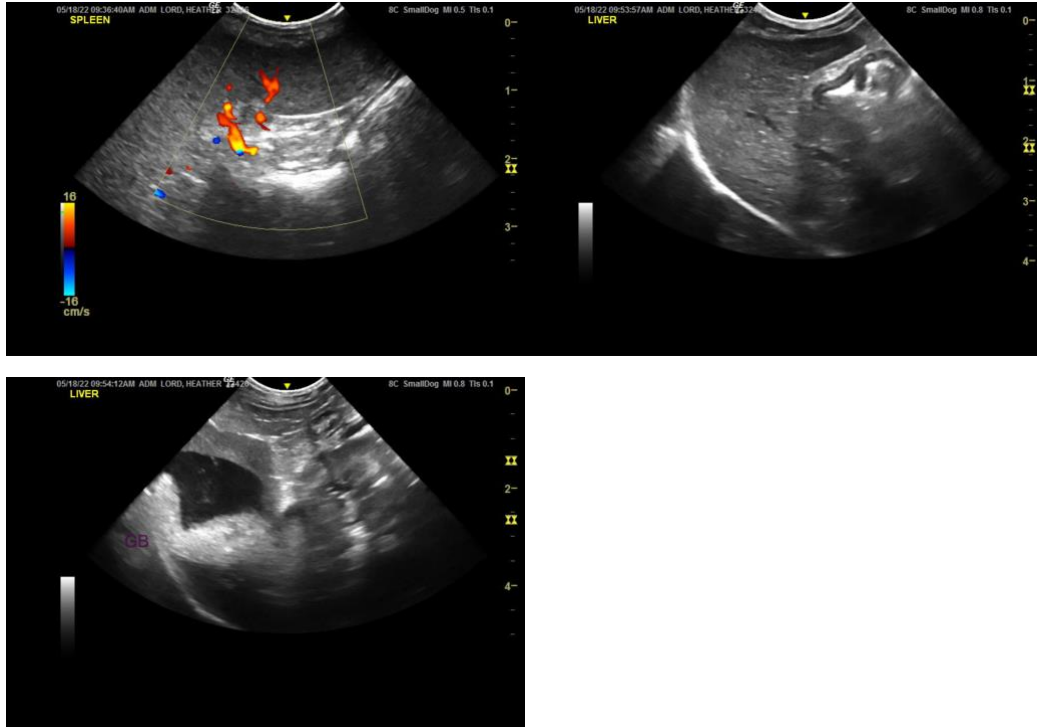
### **Secondary Findings**

- 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 splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation, with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider a urine culture and sensitivity to rule out occult pyelonephritis.
- A baseline blood pressure measurement is also recommended.
- Consider transitioning to a prescription renal diet if the patient will tolerate it.
- Serial monitoring (i.e., every 2-3 months) of the patient's renal values is recommended to assess for progression of the azotemia.
- Also consider thoracic radiographs 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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