


**PATIENT PRESENTING CLINICAL SIGNS**

Zoey Delgado-Brites  
 History: Hematuria, inappetence. Current meds: Clavamox, carprofen, Thyro tabs, omega supplement

**SPECIES**  
 Abnormal PE/Chem/CBC/UA Results: Crea 1/7, Na 156, Amy 1490, PSL 482, WBC 17.6, Plt 30, Neu 86  
 Canine UA: color-red, protein 2+, bili 2+, occult blood 2+, RBC 21-50/hpf, struvites 0-1, UPC 9.8 SG: 1.016

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Pitbull Mix **Urinary System**

**SEX**  
 Spayed Female  
 The urinary bladder is mildly distended. The wall in the region of the apex is thickened (up to 0.84 cm) and irregular. The wall tapers to a normal thickness as it extends toward the urinary bladder neck. A small amount of echogenic debris is suspended within the lumen. No cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

**AGE**  
 13 years  
 The left kidney is normal size (7.60 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. Mild pyelectasia is present (0.31 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**  
 62.2 lbs  
 The right kidney is normal size (7.03 cm in length); with a slightly irregular shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. At least 2 small cortical cysts are present. Mild to moderate pyelectasia is present (0.49 cm in the longitudinal plane). There is no evidence of nephroliths or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

AH of Roxbury

**REFERRING VET**

Dr. Elia

**INVOICE**

10920

**DATE**

5/18/22

**Adrenal Glands**

The left adrenal gland is normal size (0.97 cm at cranial pole) (0.55 cm at caudal pole) (2.97 cm in length); with a normal shape and smooth peripheral contours. A 0.88 x 0.58 cm slightly heterogenous nodule is observed at the cranial pole. In addition, a 0.57 x 0.57 cm slightly heterogenous nodule is observed at the mid- to caudal aspect. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is enlarged (2.37 cm at cranial pole) (0.59 cm at caudal pole) (3.68 cm in length); with an irregular shape. A 2.07 x 1.69 cm heterogenous nodule/mass is observed at the cranial pole. Glandular echogenicity and detail are normal at the caudal pole. The phrenicoabdominal vein and surrounding vasculature are normal.

**Spleen**

The spleen is subjectively normal in size (1.53 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is slightly mottled in appearance. Numerous, small, linear mineralizations are observed throughout the organ. Splenic vasculature is normal with no evidence of thrombosis.

**Liver**

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and subtly heterogenous in appearance. A 1.23 cm anechoic cyst is observed at the caudal aspect, adjacent to the gall bladder. 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 thin and smooth. A few small, polypoid-like lesions are arising from the luminal surface. A moderate amount of partially 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.

### ***Other***

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The urinary bladder wall changes are most consistent with cystitis. Some of the bladder wall thickening may be artifactual due to lack of full repletion. Infiltrative neoplasia (i.e., transitional cell carcinoma) cannot be completely excluded, but is considered less likely in this patient.
- Bilateral, chronic renal changes with mild pyelectasia and cortical cysts

### **Secondary Findings**

- The bilateral adrenal nodules could be consistent with nodular hyperplasia or emerging tumors, particularly the larger lesion in the right adrenal gland.
- Splenic dystrophic mineralization. This finding is often seen with endocrinopathies. The diffuse splenic parenchymal changes are nonspecific and are most likely associated with a benign process

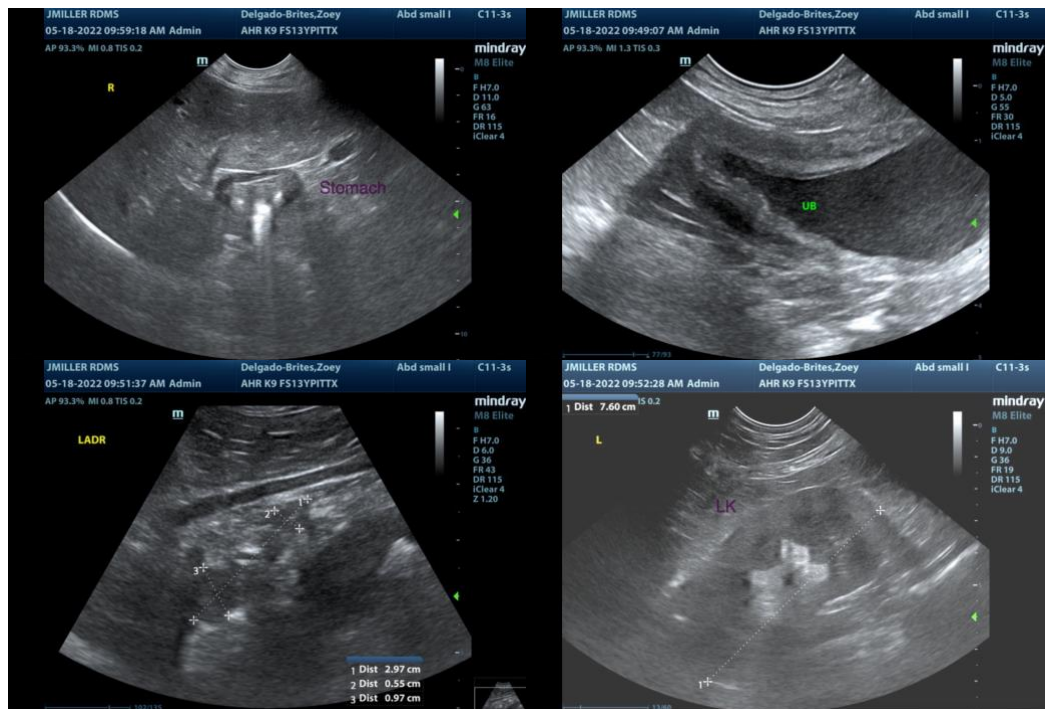
(i.e., lymphoid hyperplasia, extramedullary hematopoiesis, or similar) with a lower possibility of emerging neoplasia.

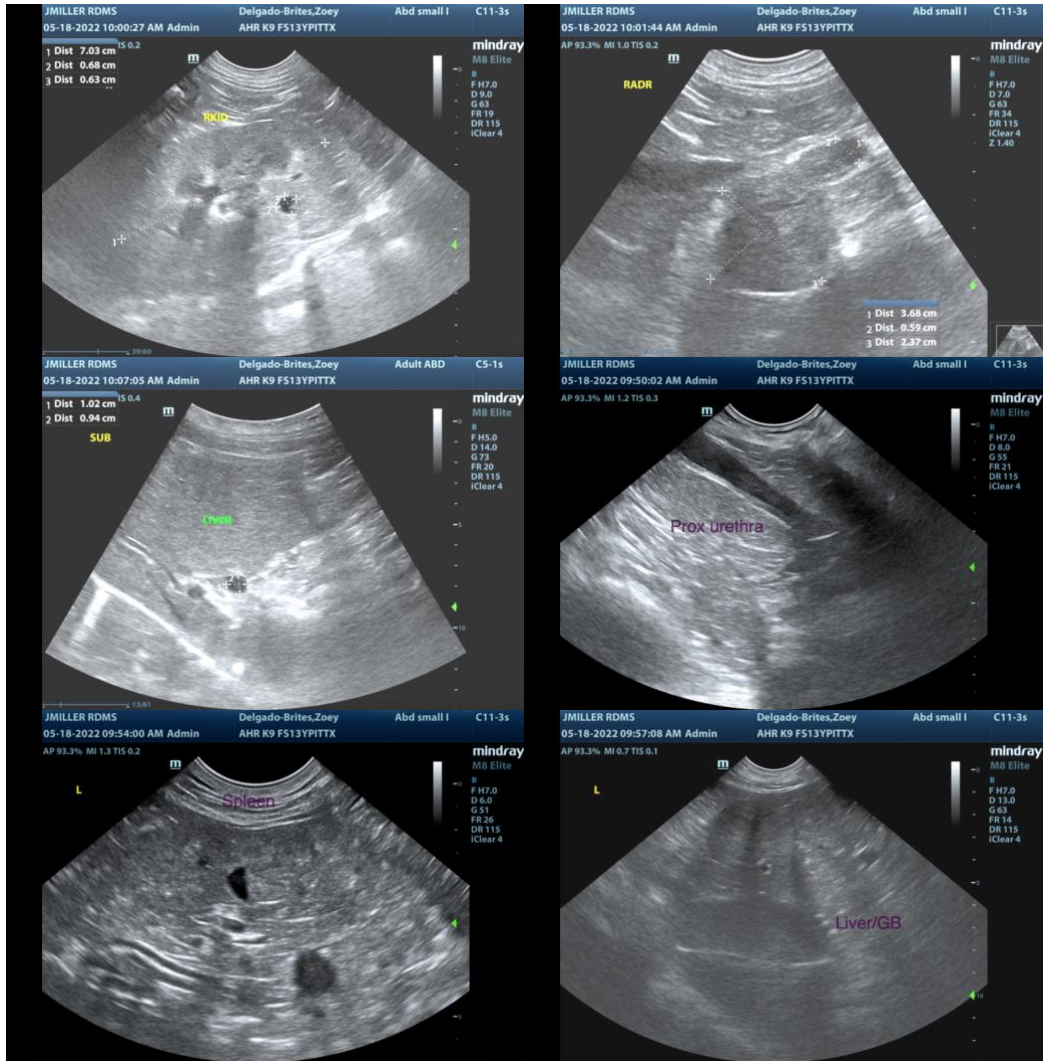
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. The hepatic cyst is likely a benign incidental finding.

\*If the platelet count is truly 30,000, the hematuria may be secondary to thrombocytopenia. Alternatively, urinary tract infection/cystitis, benign essential renal hematuria, or less likely, bladder wall neoplasia are possibilities.

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A recheck CBC (send to a diagnostic lab), along with a blood smear and manual platelet count, are recommended to confirm thrombocytopenia. If thrombocytopenia is persistent, further work-up for underlying causes (i.e., neoplasia, tick-borne disease) may be warranted. In this scenario, thoracic radiographs and a comprehensive tick panel should be considered.
- Also consider a urine culture and sensitivity of a free-catch sample.





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.

**Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)**  
 info@SonoPath.com