

**DATE PRESENTING CLINICAL SIGNS**

11/22/22 Intermittent lethargy and inappropriate urination no pattern to behavior.

**PATIENT**

Current Medications: None.

Bailey Landers

Lab Results: 11/11/22: CBC: NSF. Chem 27: NSF.

**SPECIES**

UA: to follow. T4 = 0.9.

Canine

11/17/22: Free T4 by ED = 1.1 (wnl)

**BREED**

Feist

Radiographs: to follow.

Date of Previous IntraPet Ultrasound:

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SEX**

Imaging Performed By: Rachel Brillhart, RDMS.

Female, spayed

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

2011

The urinary bladder is mildly to moderately distended with anechoic urine. The wall in the region of the apex is borderline thickened (up to 0.26 cm) with a slightly irregular mucosal surface. The wall tapers to normal thickness as it extends toward the urinary bladder neck. No cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

**WEIGHT**

22.5 lbs.

The left kidney is normal size (4.61 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. A hyperechoic medullary band is observed at the corticomedullary junction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

The right kidney is normal size (4.12 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. A hyperechoic medullary band is observed at the corticomedullary junction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Perry Hall AH

**Adrenal Glands**

The left adrenal gland is normal size (0.65 cm at cranial pole) (0.62 cm at caudal pole) (2.05 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. Baer

The right adrenal gland is normal size (0.83 cm at cranial pole) (0.52 cm at caudal pole) (1.98 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**

14263

**Spleen**

The spleen is normal in size (1.97 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. 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 gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated echogenic, partially dependent debris/sludge 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:**

- The urinary bladder wall changes could be consistent with cystitis or may be artifactual due to lack of full repletion.

### **Secondary Findings:**

- Minor, bilateral, age-related renal changes.
- The splenic parenchymal changes trend toward the benign (i.e., lymphoid hyperplasia or extramedullary hematopoiesis) with a lower possibility of emerging infiltrative neoplasia.
- Gallbladder debris/sludge, non-mucocele.

\*An obvious cause for the patient's clinical signs is not identified in this study. Considerations for the inappropriate urinations include urinary tract infection, behavioral issue, underlying metabolic problem, non-metabolic disease, other.

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

- A urine culture and sensitivity is recommended.
- Also consider orthopedic and neurologic examinations to assess for non-metabolic causes of the patient's clinical signs.
- Further workup should be based on results from the above diagnostics.



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)  
info@SonoPath.com