



**PATIENT PRESENTING CLINICAL SIGNS**

**Lily Larson** History: Lily has become very weak and lethargic over the last two days, is vomiting water after drinking, drinking very excessively, and is anorexic. She is just under normal body condition but has lost 13# since 8/25/2022 (4 months).

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results:

PE: 10% dehydrated, lenticular sclerosis normal for age, has a chronic LF lameness with m. atrophy, is quite lethargic and weak, and has mild periodontal disease. UA: SG 1.020, pH 6.5, 1000 mg/dL Glucose, 150 mg/dL Ketones, 10WBC and 2 RBC /hpf, rods and cocci seen. CBC: monocytosis (3.95 K/uL) Chem w/lytes: Glucose 411 mg/dL, Ca 7.5 mg/dL, Na 125 mmol/L, K 3.0 mmol/L, Chloride 86 mmol/L, ALP 784 U/L, Amylase >2500 U/L, Lipase 4141 U/Enlarged

**BREED**

Labr Retriever

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

**Urinary System**

Spayed Female

The urinary bladder wall is 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. The region of the trigone and the visible portion of the proximal urethra are normal.

**AGE**

8 years, 1 mo

The left kidney is normal size (6.13 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with 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.

**WEIGHT**

54 lbs

The right kidney is normal size (7.38 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with 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*)

**Adrenal Glands**

The left adrenal gland is normal size (0.66 cm at cranial pole) (0.57 cm at caudal pole) (2.22 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Carissa Rhoades

The right adrenal gland is normal size (1.04 cm at cranial pole) (0.64 cm at caudal pole) (2.41 cm in length) with a normal shape and 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**

Elizabeth AH

**Spleen**

The spleen is normal in size (1.61 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.

**REFERRING VET**

Leon Anderson, DVM

**Liver**

The liver is normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is hyperechoic relative to the spleen and attenuating. No focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

**INVOICE**

11881

**DATE**

12.19.22

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The gastric lumen is mildly 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. There is no evidence of an obstructive pattern.

### ***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.

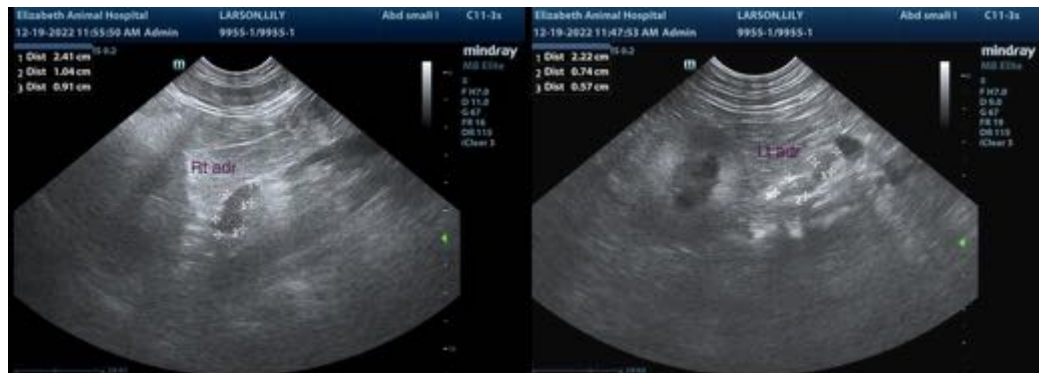
## **ULTRASONOGRAPHIC FINDINGS**

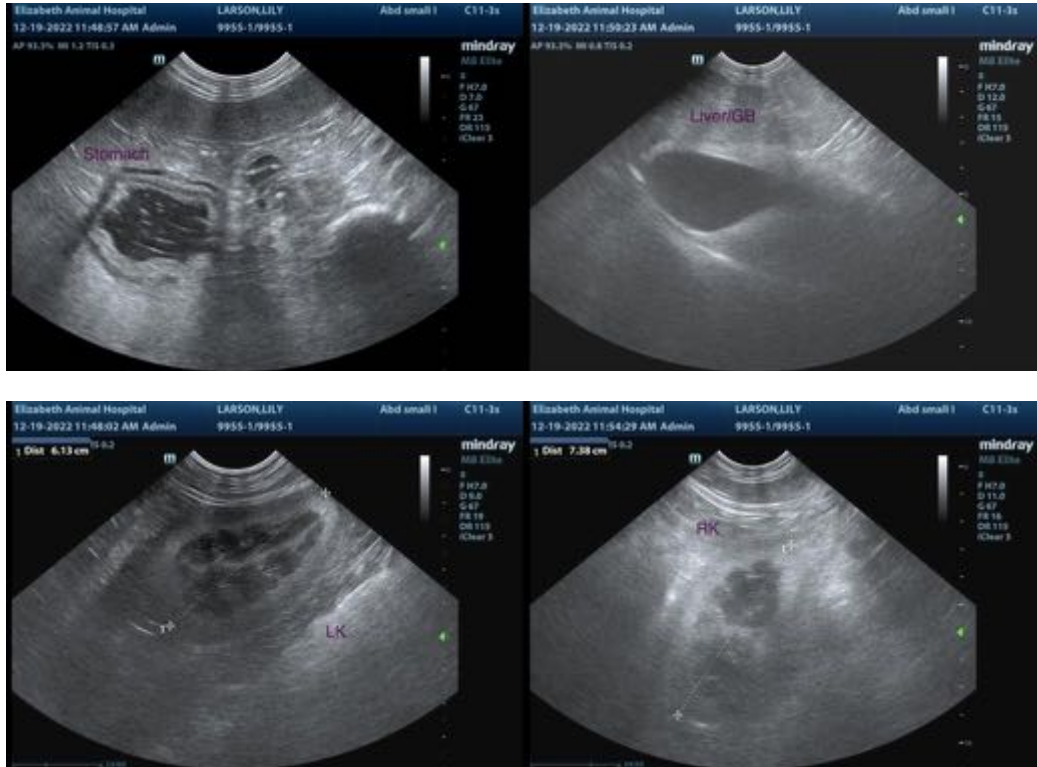
### **Primary Findings**

- Mild bilateral age-related renal changes

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

- Based on the urinalysis findings, a urine culture and sensitivity is recommended.
- Supportive care for diabetic ketoacidosis is recommended, including regular insulin IV fluids, broad-spectrum antibiotics (while awaiting urine culture and sensitivity results) and other supportive measures as needed.





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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