



**PATIENT PRESENTING CLINICAL SIGNS**

Peanut Auffret History: Patient presents for severe PU/PD, R/O neoplasia vs. other. Current med: Denamarin.

**SPECIES**

Abnormal PE/Chem/CBC/UA Results: Chem: ALP 769 (1/12/23). U/A: WNL except USG of 1.009 (USG of 1.026 first morning sample).

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

American Eskimo Mix

The urinary bladder is minimally to mildly distended with anechoic urine. The wall is diffusely thickened (up to 0.76 cm) with a slightly irregular mucosal surface. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 4-5 cm, are normal.

**SEX**

The prostate is normal in size (0.89 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

Neutered Male

**AGE**

One still image is available for interpretation. The left kidney is normal in size (6.17 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

8 years

**WEIGHT**

The right kidney is normal in size (6.09 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

65.8 lbs

**Adrenal Glands**

**INTERPRETED BY**

One still image is available for interpretation. The left adrenal gland is normal in size (0.37 cm at cranial pole) (0.59 cm at caudal pole) (2.88 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.

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

**IMAGING PERFORMED BY**

The right adrenal gland is in normal size (1.61 cm at cranial pole) (0.54 cm at caudal pole) (2.61 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.

Kelly Vazquez

**HOSPITAL NAME**

**Spleen**

Ramapo Valley AH

The spleen is normal in size (1.80 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**

**Liver**

Dr. Katara

The liver is normal to slightly prominent in size with normal 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 portal vein to caudal vena cava ratio is approximately 1: 1.

**INVOICE**

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.

12133

**DATE**

2.1.23

### ***Gastrointestinal***

The gastric lumen is not distended. A 0.61 cm shadowing structure is observed within the lumen. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract appears 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. The colonic lumen contains shadowing fecal material. 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.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

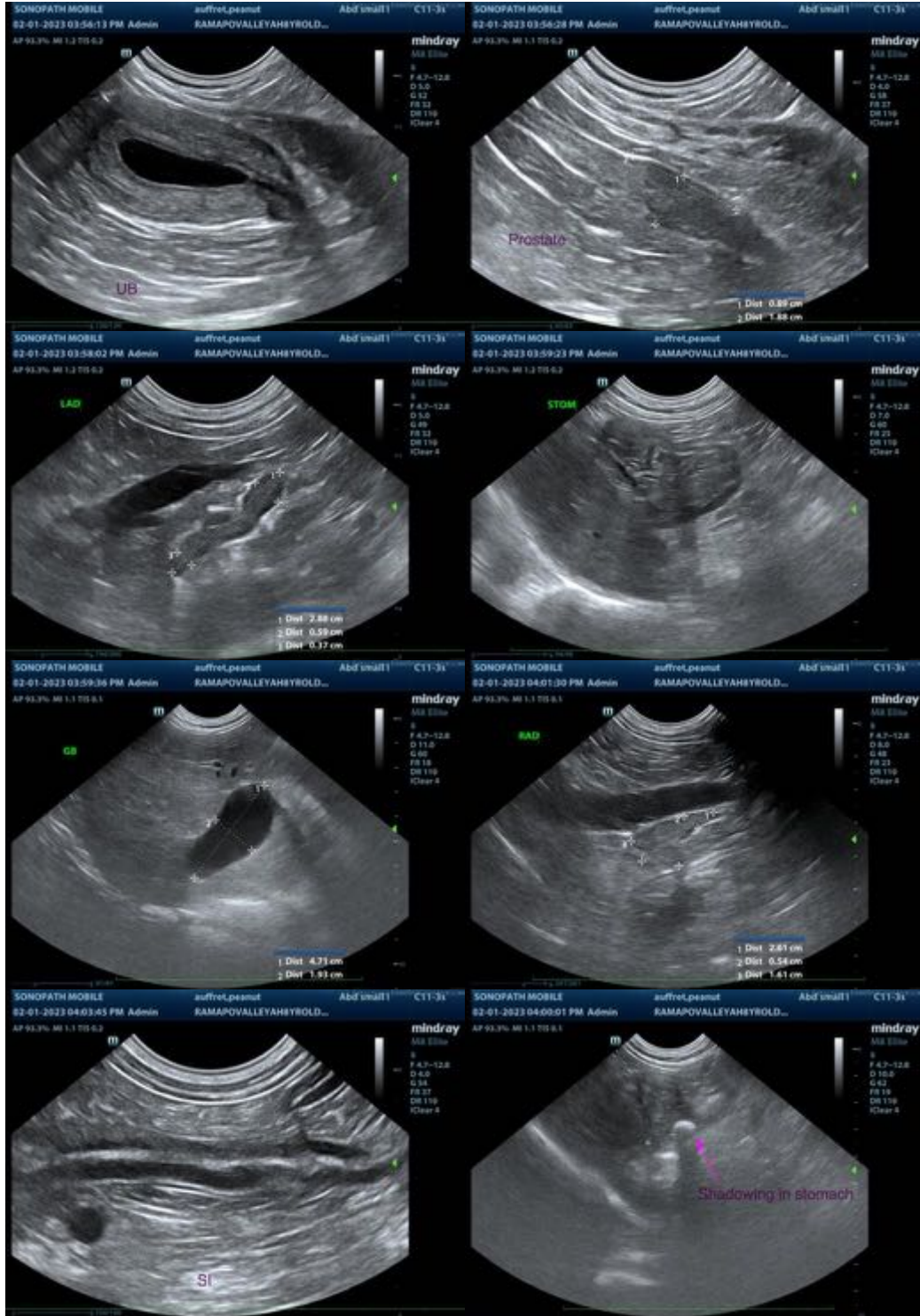
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The urinary bladder wall changes are most consistent with cystitis, with a lower possibility of diffuse infiltrative disease.

### **Secondary Findings**

- Bilateral chronic nephropathy with subtle dystrophic mineralization
- The shadowing structure within the gastric lumen may represent small foreign material, a pill, other. It appears nonobstructive at this time.

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

- Given the clinical history of PU/PD, consider the following:
  1. Urine culture and sensitivity to assess for an occult urinary tract infection
  2. Pre-and postprandial serum bile acids to assess for hepatic dysfunction
  3. Leptospirosis testing (i.e., blood and urine PCR, serology)
  4. Cushing's testing (i.e., low-dose dexamethasone suppression test or ACTH stimulation test).
  5. If the above diagnostics are inconclusive, a DDAVP trial +/- a modified water deprivation test may be warranted.





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, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)**  
[info@SonoPath.com](mailto:info@SonoPath.com)