

**DATE PRESENTING CLINICAL SIGNS**

9/8/21 History: hx of PU/PD, urine sp gr 1.006, per owner pet has a normal appetite and is no longer lethargic but is incontinent.

**PATIENT**

Kira Dugan

Current Medications: Tacrolimus.

**SPECIES**

Canine

Lab Results: ALT is 165, T Bili is 1.6, elevated lipase, specific gravity is 1.06 with proteinuria and an inactive sediment.

**BREED**

Siberian Husky

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

**SEX**

Female Spayed

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

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

8/11/09

**Urinary System**

The urinary bladder is mildly distended with anechoic urine. The wall is slightly thickened (up to 0.41 cm) with a mildly irregular mucosal surface in the region of the apex. No cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

**WEIGHT**

62 lbs.

The left kidney is normal size (7.07 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Trace pyelectasia is present (0.20 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter.

**INTERPRETED BY**

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

The right kidney is normal size (7.49 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. Hyperechoic shadowing diverticular foci are visualized. Mild pyelectasia is present (0.24 cm in the longitudinal plane) There is no evidence of nephroliths, infarcts, or hydroureter.

**HOSPITAL NAME**

Claws 'N Paws AH

**Adrenal Glands**

The left adrenal gland is normal in length with a flattened contour (0.41 cm at cranial pole) (0.51 cm at caudal pole) (2.22 cm in length). 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. Singh

The right adrenal gland is normal in length with a flattened contour (0.51 cm at cranial pole) (0.41 cm at caudal pole) (2.79 cm in length). The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**INVOICE**

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**Spleen**

The spleen is normal in size (1.25 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.

**Liver**

The liver is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and subtly mottled in appearance. No distinct focal lesions are observed. Intrahepatic biliary tracts are of normal volume. Hepatic vasculature is mildly dilated. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of echogenic debris is observed within

the lumen, most of which is gravity-dependent and some of which is suspended. 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 is normal in thickness with a normal layering pattern and appropriate mural detail. In a few segments of the jejunum, there is mild thickening of the submucosal layer. In these regions, the mesentery effacing the serosal surface is mildly hyperechoic. Discrete 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***

There is no evidence of free fluid. A few prominent mesenteric lymph nodes are visualized, the largest measuring 1.62 cm in length.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Bilateral, age-related renal changes with trace to mild pyelectasia and dystrophic mineralization.
- The flattened adrenal glands may be a normal variant or could be consistent with early atrophy (i.e., secondary to hypoadrenocorticism)
- The hepatic parenchymal changes are non-specific and could be secondary to inflammatory disease, reactive hepatopathy, hepatotoxicosis (i.e., copper), infiltrative neoplasia (less likely), age-related change, and other. The hepatic vascular dilation is suggestive of passive congestion which can be secondary to congestive heart failure, fluid overload, and other.

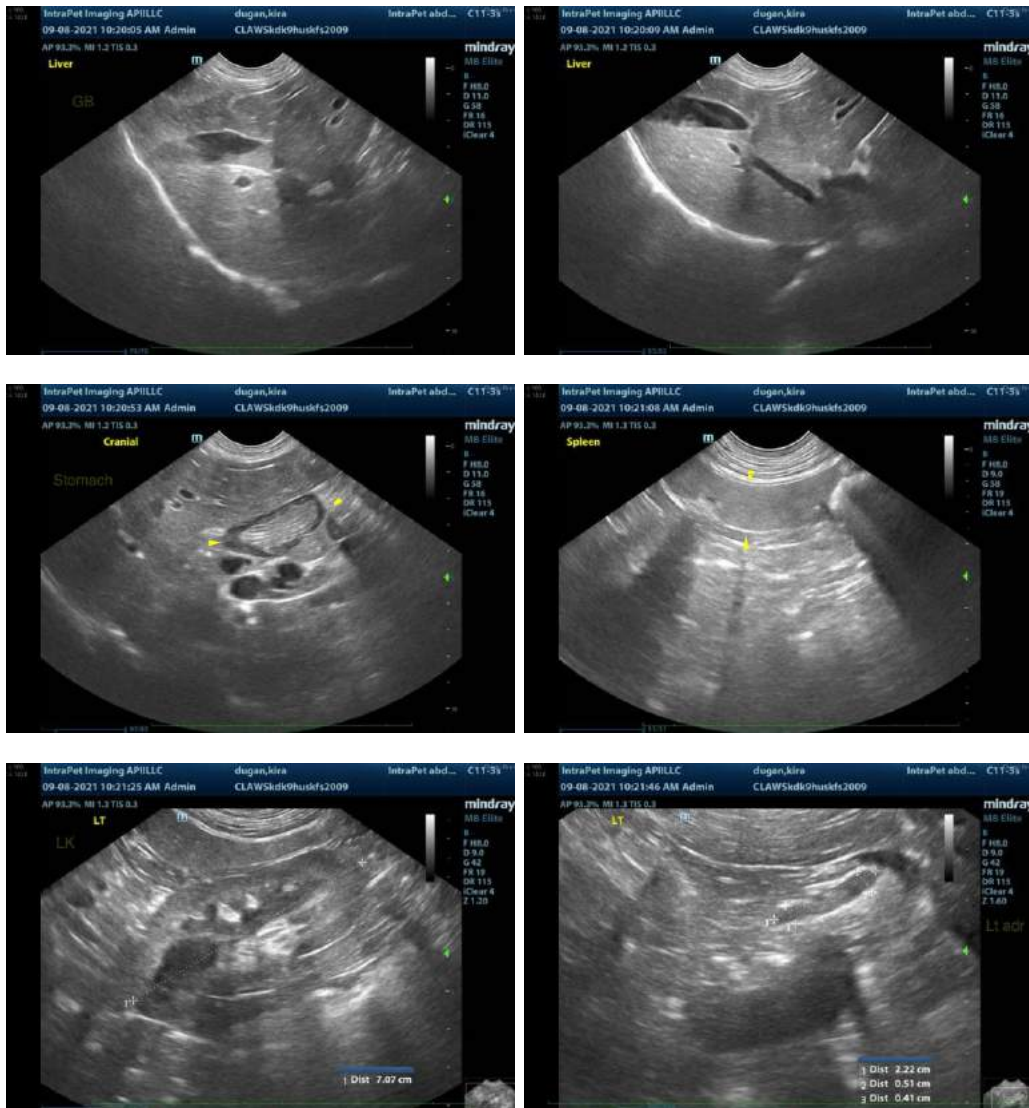
### **Secondary Findings:**

- The urinary bladder wall changes could be consistent with cystitis or may be artifactual due to lack of full repletion. Correlation with clinical findings is recommended.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- The jejunal changes are most consistent with an inflammatory process.

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

1. Given the patient's clinical history, consider the following:
  - a. Urine culture and sensitivity.
  - b. UPC (if there is no evidence of a urinary tract infection)

- c. Cushing's testing (\*\*\*)It should be noted that Cushing's disease is rare in dogs with a normal ALP).
  - d. Leptospirosis testing (i.e., blood and urine PCR, serology).
2. Depending on the results of the above diagnostics, a DDAVP trial +/- a modified water deprivation test may be warranted.
3. Three-view thoracic radiographs are recommended to assess cardiopulmonary status. Depending on the results, an echocardiogram may be warranted.





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.

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