

**DATE PRESENTING CLINICAL SIGNS**

5/4/23

**PATIENT**

Kota Can De Zande

History: Inappetence x 10 days, nibbles at food after 2 day hospitalization in IVF and supportive care. Hx of urinary incontinence controlled by incurin, and keppra for seizures, also controlled currently. Seems restless but less so since IV days - but since then still is not 100% back to herself. Blood work from 4/25/23: hematocrit 34.8%, ALP 2275, ALT 167, BUN 31, in-house T4 normal, 4DX negative, CPL snap test abnormal. In February 2023 ALP was 242 and ALT was 31.

**SPECIES**

Canine

Current Medications: keppra ER BID 750 1/2 BID, incurin 1mg SID, cerenia 60mg SID, metronidazole 250 BID, clavamox 375 BID, doxy 100mg BID

**BREED**

Siberian Husky

Lab Results: elevated liver values, mild anemia, abnormal snap cPL. Will be rechecking labwork on Monday, 5/1.

Date of Previous IntraPet Ultrasound: 8/23/22. See attached.

Sedation: IV: Torb.

Stat Report: Not requested.

**SEX**

Spayed Female

Imaging Performed By: Rachel Brillhart, RDMS.

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

3/6/11

**Urinary System**

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.

**WEIGHT**

57 Pounds

The left kidney presented normal size (5.23 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS

The right kidney presented normal size (5.39 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Stay Pet Vet

**Adrenal Glands****REFERRING VET**

Dr. Klimovitz

The left adrenal gland is normal size (1.58 cm at cranial pole) (0.56 cm at caudal pole) (2.46 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**

22307

The right adrenal gland is mildly enlarged (0.67 cm at cranial pole) (0.80 cm at caudal pole) (2.35 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.

**Spleen**

The spleen is normal in size (1.71 cm) 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 normal in size with normal curvilinear peripheral contours. The parenchyma is slightly mottled in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is hyperechoic to mineralized. A small amount of gravity dependent hyperechoic debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The gastric lumen is not 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.

### ***Lymph Nodes***

The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The hyperechoic to mineralized gallbladder wall (aka “porcelain” gallbladder) is most consistent with cholecystitis. This finding is similar to the previous sonogram. Given the appearance of the gallbladder in conjunction with the spike in liver values since February, bacterial cholecystitis and/or bacterial cholangiohepatitis are of primary concern. Other differentials include regenerative nodular hyperplasia, age-related remodeling, chronic hepatitis, fibrosis, hepatotoxicity, vacuolar hepatopathy or other hepatopathies.

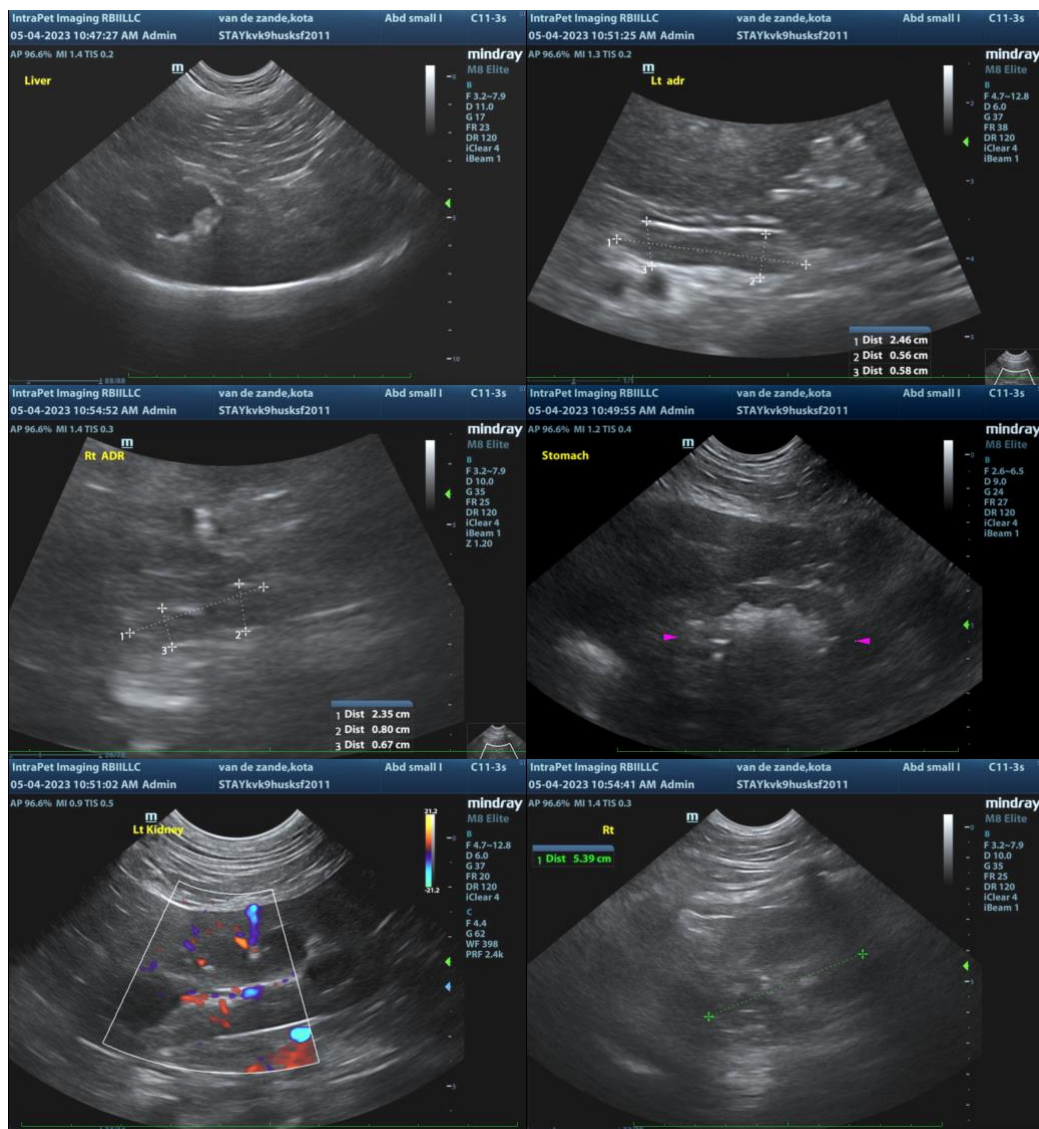
### **Secondary Findings**

- Mild right adrenomegaly – This is a new finding.

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

- Consider pre-and postprandial serum bile acids to assess hepatic function.
- Also consider Leptospirosis testing (i.e., blood and urine PCR, serology), particularly if clinical suspicion for disease is high.

- Depending on the above results, hepatic tissue sampling (FNA or biopsies) and bile cultures may be warranted.
- Given the patients age and vague clinical signs, also consider three view thoracic radiographs to assess for occult disease in the chest.
- If the above diagnostics are inconclusive, consider evaluating for other causes of inappetence (i.e., orthopedic, neurologic, tick-borne disease, GI disease, other).



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](mailto:info@SonoPath.com)