

**DATE PRESENTING CLINICAL SIGNS**

11/12/21

History: Chronic diarrhea and weight loss/inability to gain weight despite good appetite. Blood normal other than ALT > 1000. Bile acids and baseline cortisol WNL. Treated with Metronidazole, Panacur, Provable, and Diagal. Physical exam normal other than underweight.

**PATIENT**

Mango Williams

Current Medications: No medications at this time  
Lab Results: ALT > 1000, Normal bile acids and baseline cortisol,  
Negative fecal

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous  
Sedation: Not required for scan.  
Stat Report: Not requested

**BREED**

Blue Heeler X

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Intact Female

**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**AGE**

6/16/20

The left kidney presented normal size (5.50 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

25 Pounds

The right kidney presented normal size (4.99 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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(Small Animal  
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**Adrenal Glands**

The left adrenal gland is normal size (0.41 cm at cranial pole) (0.46 cm at caudal pole) (1.28 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.

**HOSPITAL NAME**

Churchville Vet Clinic

The right adrenal gland is normal size (0.77 cm at cranial pole) (0.57 cm at caudal pole) (2.17 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. Danneberger

**Spleen**

The spleen is normal in size (0.97 cm) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**INVOICE**

29801

**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 scant amount of echogenic debris is observed within the lumen. The cystic and common bile ducts are normal.

### ***Gastrointestinal***

The gastric lumen is distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. There is slight disruption in the normal 1:3 muscularis/mucosa ratio in some segments. Discreet masses are not identified. The colonic lumen is distended with granular appearing 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***

Trace free fluid is observed. A few prominent lymph nodes are observed at the mesenteric root, the largest measuring 1.15 cm in length. Surrounding mesentery is mildly hyperechoic.

### ***Other***

The uterine body is visible at 0.69 cm in width.

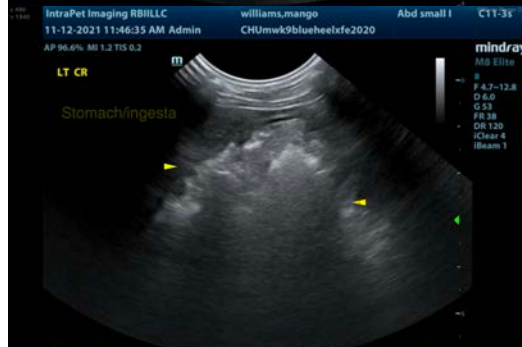
## **ULTRASONOGRAPHIC FINDINGS**

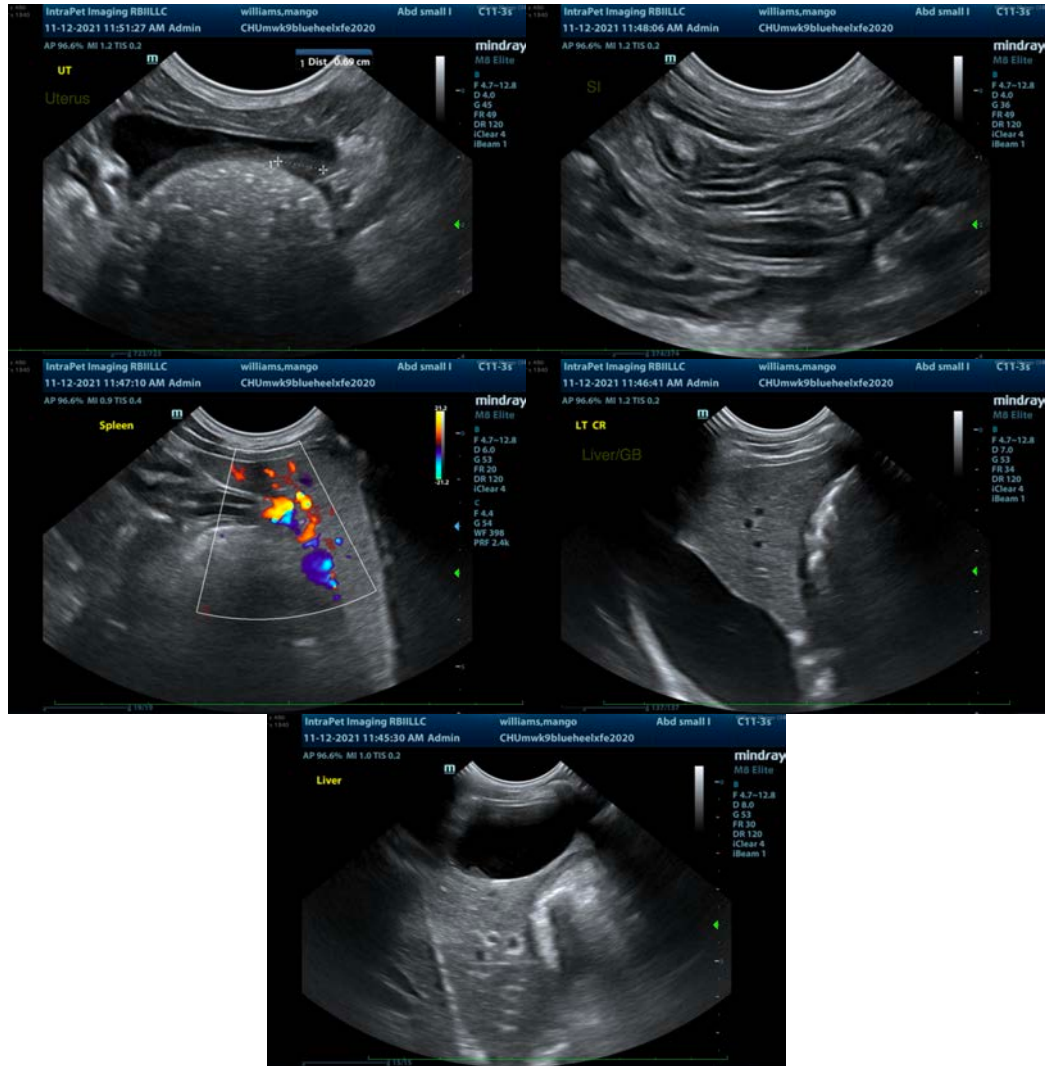
- The small intestinal wall changes could be consistent with inflammatory bowel disease.
- The trace ascites may be secondary to increased vascular permeability, increased hydrostatic pressure, or low oncotic pressure. Correlation with clinical findings is recommended.
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., reactive hepatopathy, bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) should be considered.
- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.

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

Consider a fine needle aspirate of the liver if clotting status is appropriate. A 25-gauge needle should be used. Also consider Leptospirosis testing, particularly if the ALT elevation is acute in nature. Further diagnostic/therapeutic considerations include:

- 1) GI panel (sent to Texas A&M) to further assess for small intestinal disease, exocrine pancreatic insufficiency, etc.
- 2) Limited antigen diet trial
- 3) Depending on the results of the above diagnostics/therapeutics, an abdominal exploratory with a liver biopsy, aerobic/anaerobic bile cultures, and gastrointestinal biopsies may be warranted. An ovariectomy can be performed concurrently.





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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