

**DATE PRESENTING CLINICAL SIGNS**

1/3/23

Patient will eat paper, socks, etc. Has been on a bland diet (EN) for long time. Owner had guests over and a mask had been left out. He vomited up the mask and looks like it was intact Friday night. Saturday vomited bile with a pink tinge. Was in line to be seen here yesterday and owner was restricting food but they were not called in and he seemed to be feeling better. Now this morning, he is passing bloody diarrhea. Saw RDVM this morning, fed EN and white rice prior to visit. Per owner, RDVM rads were bunched but blood work was normal.

**PATIENT**

Argos Bondrole

**SPECIES**

Canine

Current Medications: Ondansetron, Gabapentin, Entyce, Metronidazole, Provable, Protonix.

Lab Results: See attached.

Radiographs: improved-- stomach small, most gas is in the colon, no obvious obstructive change

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**Treeing Walker  
Coonhound**SEX**

Neutered Male

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**AGE**

3/5/20

The prostate is unable to be fully visualized in these images.

**WEIGHT**

62.5 Pounds

The right kidney is normal in size (7.23 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM

The left kidney is normal in size (7.17 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**HOSPITAL NAME**Animal Emergency  
Hospital**Adrenal Glands**

The right adrenal gland is normal in size (3.2 cm long x 0.67 cm at the cranial pole and 0.92 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Goessling

The left adrenal gland is normal in size (3.76 cm long x 0.65 cm at the cranial pole and 0.69 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**INVOICE**

43877

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Mild parenchymal remodeling is noted with a diffusely mildly coarse architecture and subtly increased portal markings. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distention or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### ***Gastrointestinal***

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

A prominent hypoechoic lymph node is noted medial to the spleen, measuring 2.54 cm long x 1.19 cm thick.

## **PRIMARY FINDINGS**

- **Mildly coarse liver with prominent portal markings** – This could be a normal patient variant. However, this appearance can also be seen with an acute hepatopathy or hepatitis/cholangiohepatitis. Round cell neoplasia is also possible but considered less likely in an otherwise normally sized liver with sharp margins. This finding should be interpreted in combination with any supportive laboratory changes, etc. to suggest a hepatopathy.
- **Prominent splenic lymph node** – Both reactive lymphadenopathy as well as infiltrative neoplasia are differentials and can't be differentiated without tissue sampling.

## **SECONDARY FINDINGS**

- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

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

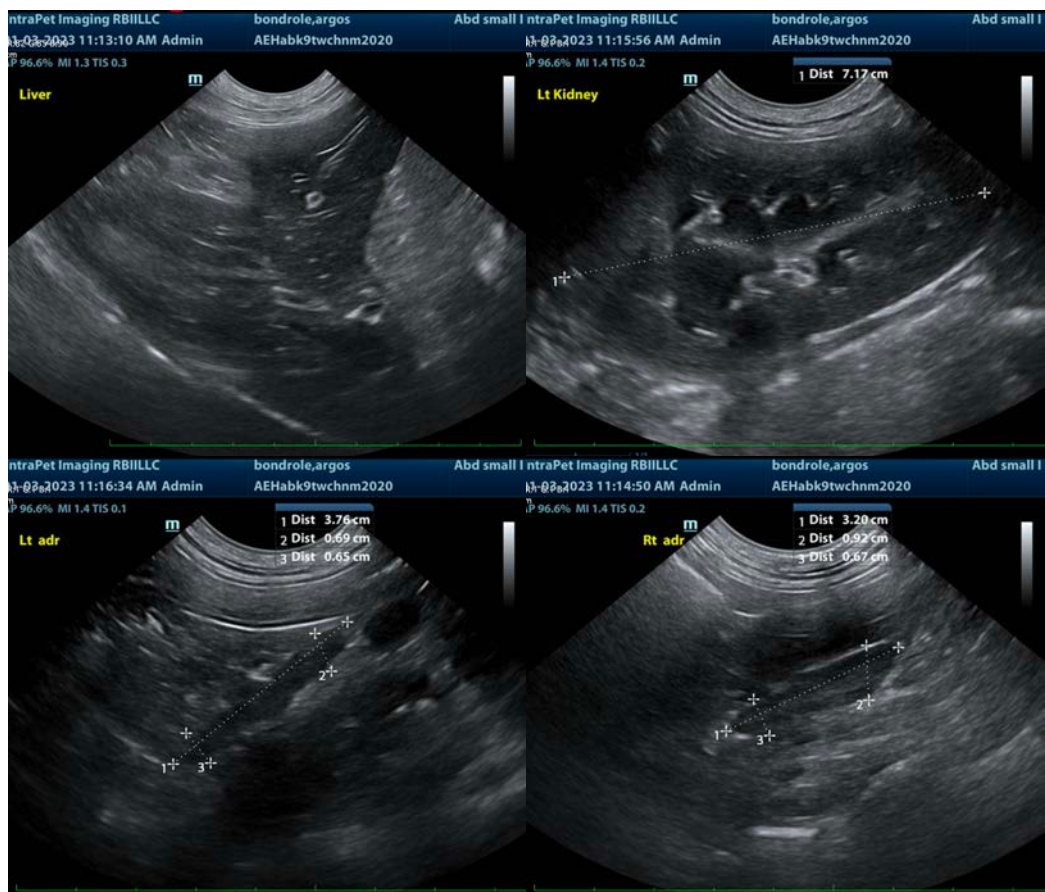
Given the relatively non-specific ultrasound changes noted above, if this patient's clinical signs are acute in nature and are improving, then continued supportive/symptomatic medical management of gastroenteritis secondary to possible dietary indiscretion is recommended with antiemetics, gastroprotectants including Sucralfate, a probiotic such as Visbiome or Provable, bland diet, etc.

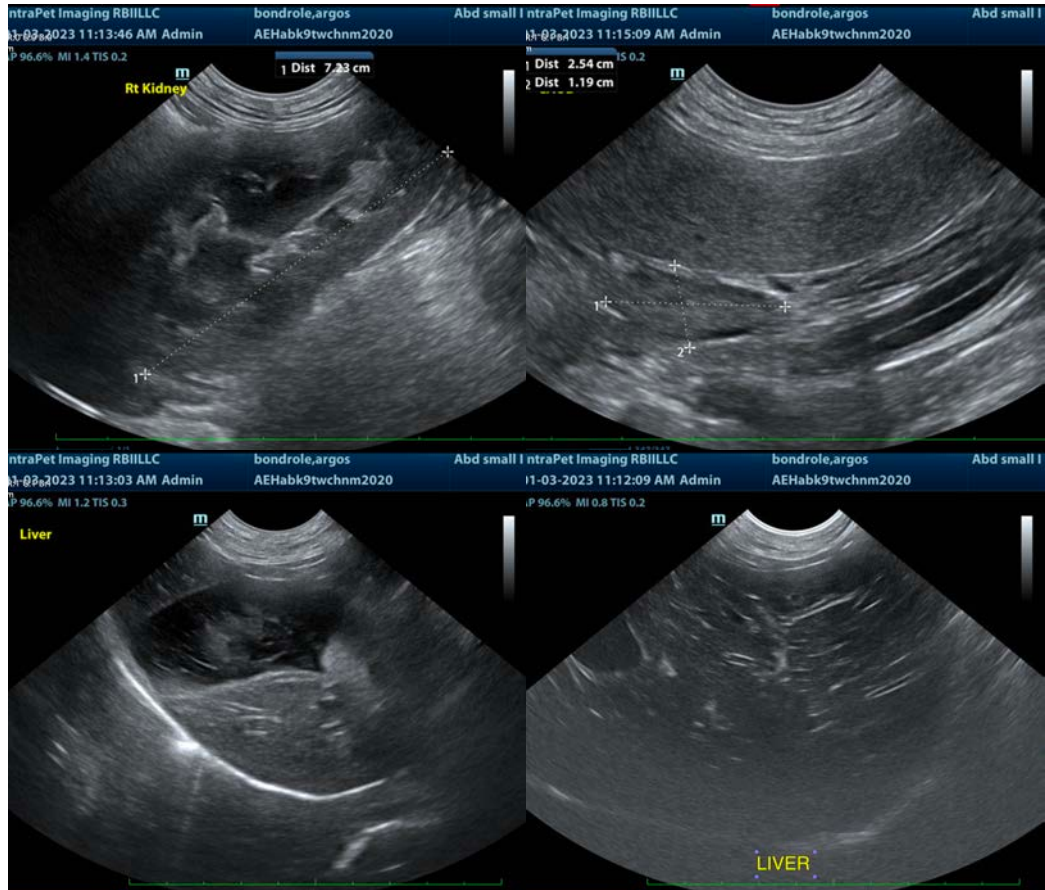
Additionally, empirical deworming with a 5-day course of Panacur could be considered. However, if this is a recurrence of chronic intermittent gastrointestinal upset, further evaluation is recommended, beginning with a baseline cortisol. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

While subtle/mild in nature, given the changes noted above, a fine needle aspirate of the liver +/- spleen and even an enlarged lymph node if it can safely be reached could be considered if patient's coagulation status is appropriate.





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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