**DATE**

6/28/22

**PRESENTING CLINICAL SIGNS**

Last week started with gastroenteritis signs; Vomiting off and on, diarrhea; saw rDVM; started Metronidazole. Was not getting better; back to rDVM on Friday (3 days ago); had full BW, radiographs, and AUS (Intrapet.) Final US report showed possible material in stomach despite being fasted. Discharged Friday but still not eating over weekend so went to ER in Ellicott City; had raw skin from D+ so added Amoxicillin. Back to rDVM today; still not eating; still has D+; referred for IVF, continued medical management, and recheck AUS to evaluate stomach. Did eat EN last night but nothing today. No vomiting since 6/17 even when off the Cerenia. Seemed nauseous/drooling last Friday 6/24 but no vomiting.

**PATIENT**

Buddy Peyton

Current Medications: Amoxicillin (1 d); Metronidazole (3 d; had 5 day course starting 10 days ago then restarted); ondansetron (3 days); Fenbendazole (started 6/27 pm).

**SPECIES**

Canine

Lab Results: 6/24 WNL.

**BREED**

Labrador

Date of Previous IntraPet Ultrasound: 6/24/22. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SEX**

Intact male

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

Urinary bladder is adequately 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**

10/26/20

Thee prostate is normal for an intact dog.

**WEIGHT**

60.8 lbs

Left kidney is normal is size (6.57 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

Right kidney is normal is size (6.68 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**Ainmal Emergency  
Hospital**Adrenal Glands**

Left adrenal gland is normal in size (1.96 cm long, 0.59 cm at cranial pole and 0.64 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (2.89 cm long, 0.74 at cranial pole and 0.8 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Martinoli

**Spleen**

Spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

**INVOICE**

31300

**Liver**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

The stomach is moderately to markedly over distended with suspected barium and ingesta from a meal approximately 16 hours ago. The contents are amorphous echogenic, suspected to be ingesta; however, again soft foreign material or the like cannot be ruled out. In some images the wall appears mildly thick. In the majority of images the wall is of normal thickness and normal in layering. The thickness is thought to be a combination of rugal fold measurement or may be chronic inflammation and edema from the chronic vomiting more than infiltrative disease.

The visible small intestines are normal in wall thickness and layering. 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 observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

Lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail. No visible free fluid was noted in these images and there is no testicular pathology noted.

## **ULTRASONOGRAPHIC FINDINGS**

1. Hypersplenism – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis (leave amyloidosis out if canine) as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
2. Stomach remains moderately to markedly over distended with contents believed to be ingesta combined with barium based on appearance and history. However, the last reported meal was 16+ hours ago. Therefore, delayed gastric emptying is possible/suspected. Soft/cloth foreign material or the like cannot be definitively ruled out.
3. Reactive lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely

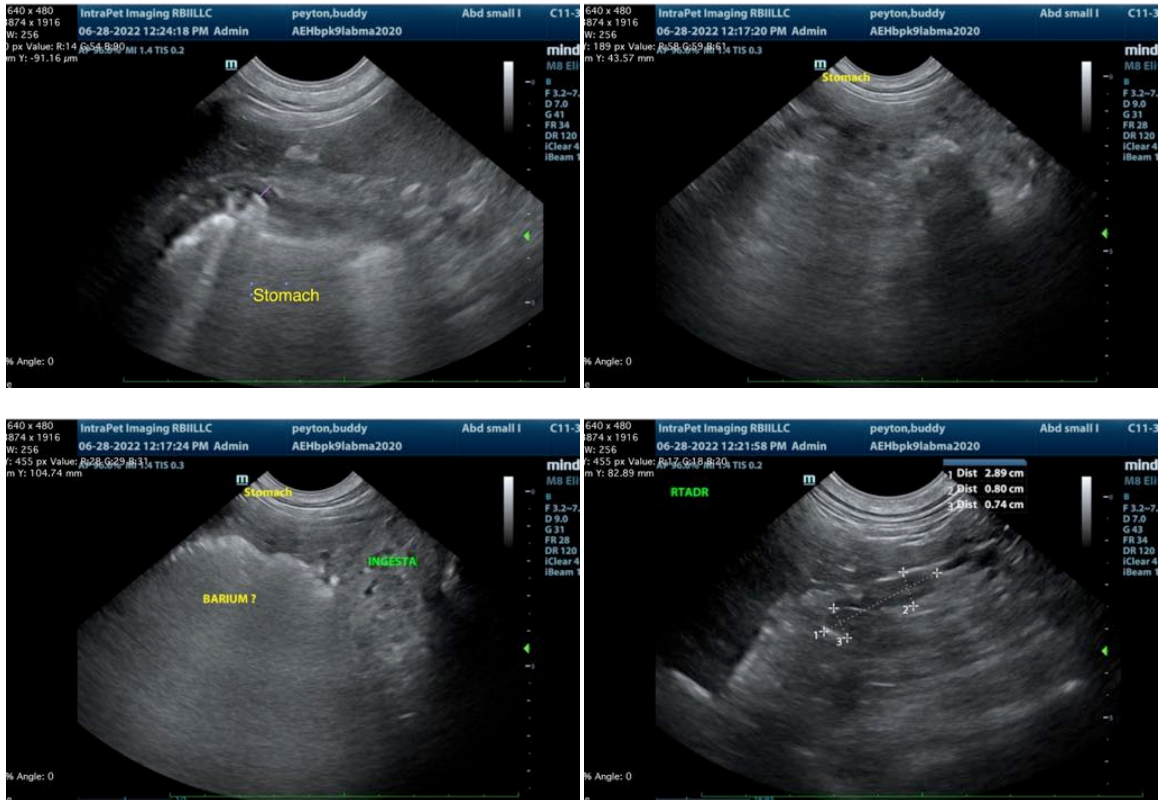
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given the chronicity of these gastrointestinal signs a more advanced GI work-up is warranted to include:

- 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 combined with a

baseline cortisol. If the baseline cortisol is  $<2$ , a full follow-up ACTH test is recommended to rule out unlikely, but possible hypoadrenocorticism.

- A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.
- FNA of the spleen can be considered if the patient's coagulation status is appropriate.
- In the meantime, it sounds like on reported history that the vomiting has subsided and the patient ate last night, so potentially the clinical signs are starting to improve. If not an appetite stimulant could be added to the treatment plan now that the vomiting has reportedly subsided. However, if clinical signs persist gastroscopy/upper endoscopy is warranted for further evaluation of the gastric outflow tract +/- removal of gastric foreign body if found.







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.

**Beth Johnson, DVM DACVIM**

Beth.Johnson@SonoPath.com