**DATE PRESENTING CLINICAL SIGNS**

2/13/22

Presenting Complaint: Vomiting. In Pain/Discomfort.

**PATIENT**

Storm Deickman

History: Date: 02-12-2022 Notes: P presents for vomiting, not being able to keep any food or water down in the last day and a half. Also having diarrhea and O thinks urine is malodorous. O did share some of their Reese's ice cream with pet last night but often does this. Nothing else new. nothing O knows P could have gotten into. Eats Fromm diet and is on Cosequin. over last year, O has noticed that P has been losing weight and musculature appears to be decreased. NO other relevant medical history per O - P has been healthy.

**SPECIES**

Canine

Assessments: Acute V/D.

Pancreatitis r/o: underlying gi/liver pathology.

**BREED**

Labrador X

Current Medications: Ondansetron 2mg/mL Injection, Maropitant Citrate (Cerenia) 10mg/mL Solution Injection, Buprenorphine 0.6mg/mL, and Vitamin B Complex Injection.

**SEX**

Spayed Female

Lab Results: Attached.

**AGE**

2010

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**WEIGHT**

63.6 Pounds

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

Urinary bladder is moderately distended with anechoic contents. It has normal uniform wall thickness (< 0.2 cm). No masses or cystoliths are observed.

**IMAGING PERFORMED BY**

Rachel Brillhart

Left kidney is normal is size (7.39 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

Right kidney is normal is size (6.5 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**Adrenal Glands**

Left adrenal gland is normal in size (3.29 cm long x 1.26 cm at the cranial pole and 1.34 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable.

**HOSPITAL NAME**Animal Emergency  
Hospital

Right adrenal gland is normal in size (3.6 cm long x 0.92 cm at the cranial pole and 0.95 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable.

**Spleen**

Spleen is subjectively normal in size with normal smooth margins. Parenchyma is normal in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

**REFERRING VET**

Dr. Kraselski

**Liver**

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature appears normal.

**INVOICE**

35619

GB is moderately distended with anechoic bile and gravity dependent echogenic sediment. 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. However, it is upper limits of normal in thickness adjacent to the pancreas. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The small intestines are normal in wall thickness and layering. However, the duodenum is at upper limits of normal in thickness adjacent to the pancreas. Small intestinal motility appears adequate (1-3 contractions per min). There are no luminal contents noted within small intestines.

Colon is normal in wall thickness (< 0.2 cm) and layering.

### *Pancreas*

The pancreas appears as a primarily hypoechoic but heterogenous mass caudal to the stomach with poor cranial abdominal detail noted around the pancreas, and hyperechoic/hyperreactive peripancreatic mesentery and fat. No free fluid is appreciated. Visible capsule remains smooth and normal in contour, and there is no visible pancreatic duct dilation. Blood flow is appreciated throughout the pancreatic parenchyma.

### *Free Abdomen*

Lymph nodes are normal with no observed enlargement.

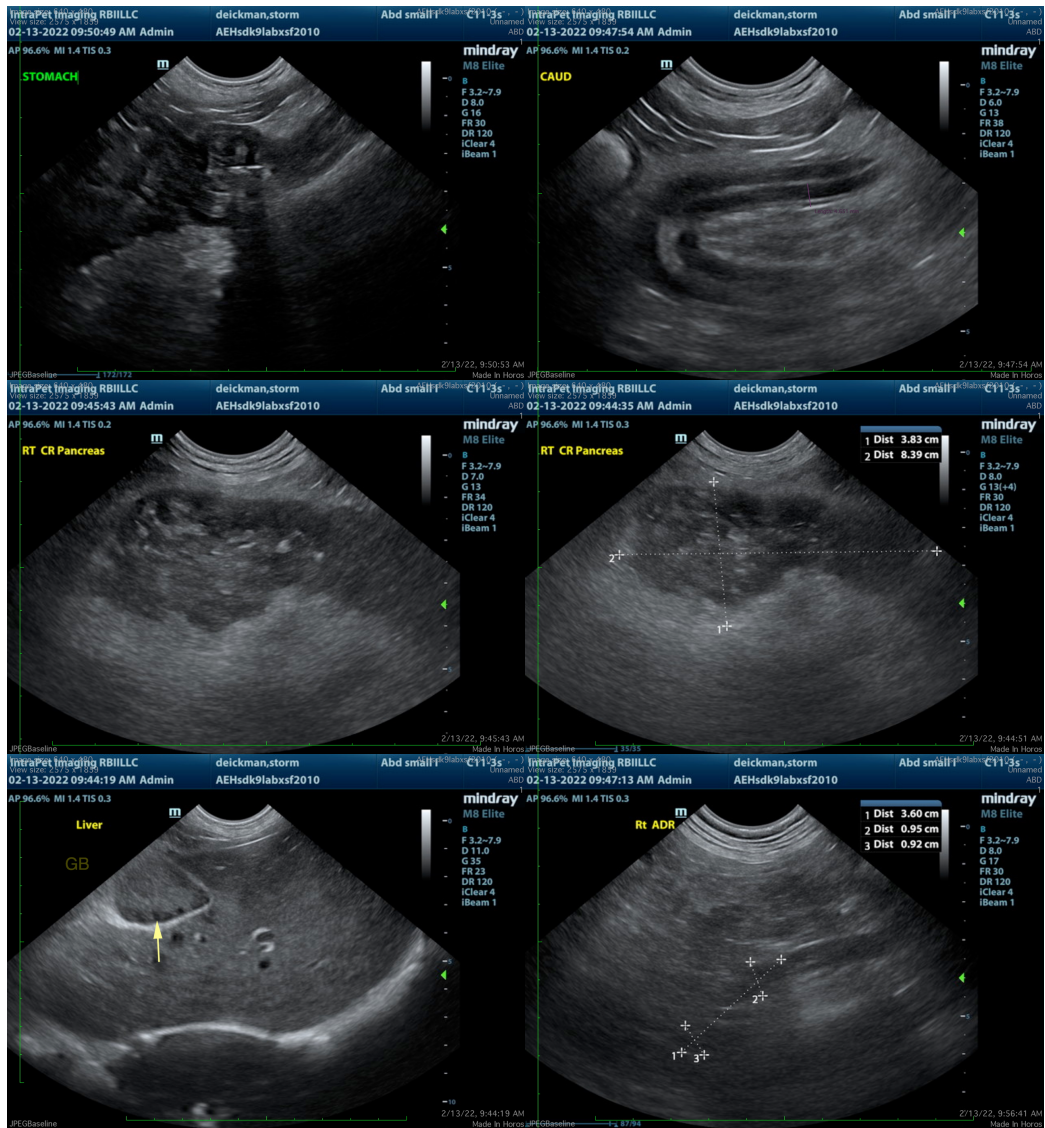
## **ULTRASONOGRAPHIC FINDINGS**

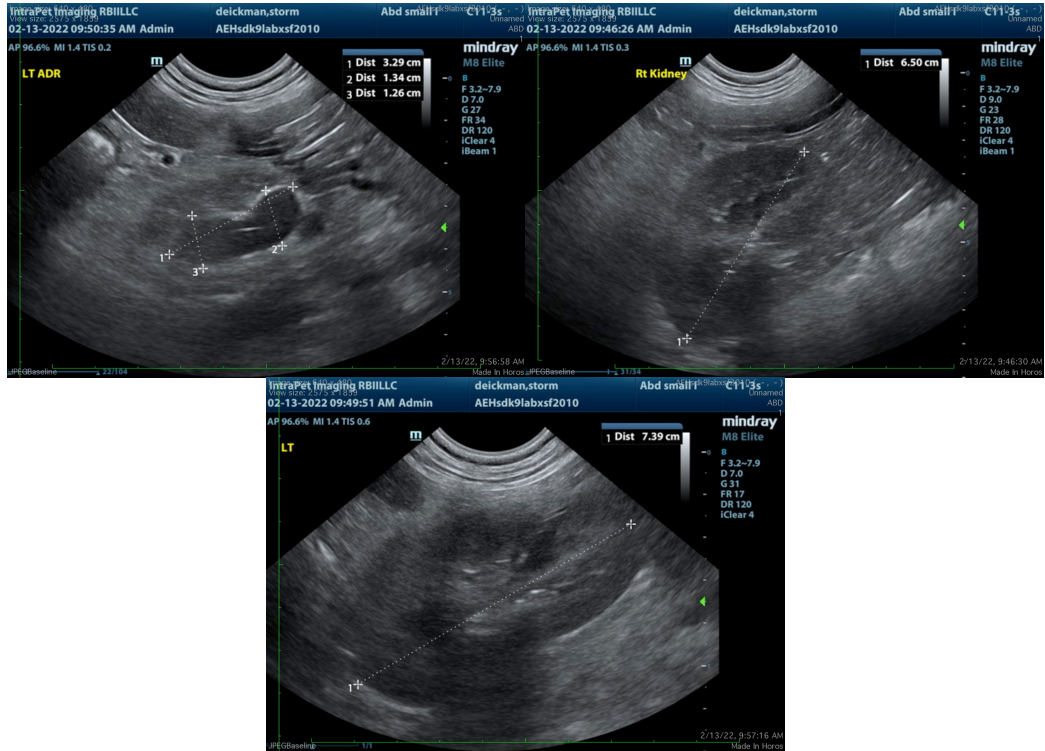
- Heterogeneous liver - Differentials for hepatic changes include both benign steroid (vacuolar) hepatopathy or extramedullary hematopoiesis as well as infiltrative round cell or metastatic neoplasia.
- Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary 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.
- Moderate to severe acute pancreatitis with peripancreatic inflammatory changes present including mildly thick stomach and duodenum adjacent to the pancreas - consistent with focal gastroenteritis, likely secondary to pancreatitis. Infiltrative pancreatic neoplasia cannot be ruled out, but is considered much less likely given the lack of curvilinear and/or pancreatic duct distortion.

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

Recommendations, given the more chronic weight loss, etc., include a gastrointestinal malabsorption panel to include TLI, PLI, folate and cobalamin to Texas A&M GI laboratory for further assessment of gastrointestinal and pancreatic health. Treatment recommendations include medical management of acute pancreatitis/gastroenteritis with IV fluids, antiemetics, gastroprotectants, appetite stimulants (if necessary), pain management as needed, broad-spectrum antibiotics, etc. If necessary, fresh frozen plasma +/- hyperbaric oxygen therapy could be considered.

Following resolution of acute clinical signs, recheck of the pancreas is recommended. If a mass like appearance is still present, fine needle aspirate of the pancreas as well as the liver could be considered to definitively rule out infiltrative neoplasia. If not recently evaluated, 3-view thoracic radiographs are recommended to further assess cardiopulmonary status and further assess possible metastatic disease.





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**  
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