

**DATE PRESENTING CLINICAL SIGNS**

3/2/22

History of chronic intermittent vomiting. Previously ~ once per month per week. Recently will vomit 4-5 times per episode. Active retching takes place. Vomitus contains bile and occasionally undigested kibble. Vomiting varies in time of day. Not consistently after meals. Not following exercise/excitement. Trial with slow feeder bowl initially helped, but then patient worsened again. Patient treated for gastroenteritis with Cerenia and Carafate. Symptoms stopped during treatment, but recurred 24-48 hours after stopping medications. Trial of Famotidine 1mg/kg BID did not improve clinical signs. Trial of Hill's I/D low fat did not resolve clinical signs. Omeprazole 1mg/kg BID did not improve clinical signs. Patient was previously eating a bison based diet. Physical exam unremarkable. Patient had lost 5 lbs since exam 8 months prior.

PATIENT

Charlie Stevens

SPECIES

Canine

BREED

Pit Bull

Current Medications: Omeprazole 30mg BID.

Lab Results: mildly increased hematocrit. Otherwise NSF on bloodwork. Spec CPL WNL.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: IV sedation.

Stat Report: Not requested.

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

12/1/16

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

WEIGHT

67.1 Pounds

The prostate is normal in size (0.71 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

The left kidney has a normal shape and size (7.32 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

The right kidney has a normal shape and size (6.91 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Paradise AH

Adrenal Glands

The left adrenal gland is normal in size measuring 0.65 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

REFERRING VET

Dr. Pound

The right adrenal gland is normal in size measuring 0.75 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

INVOICE

35818

Spleen

The spleen is large in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized. The spleen appears folded upon itself in the abdomen.

Liver

The liver is subjectively normal in size, and hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measured 0.5 cm. Jejunum wall measured 0.37 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are prominent mesenteric lymph nodes visualized at the root of the mesentery, measuring 1.15 cm, 0.65 cm, and 0.78 cm. The omentum is of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Subjectively large spleen with a normal smooth capsule and normal echogenicity – The significance of the enlarged spleen is unclear, as it appears relatively normal and is folded upon itself in the abdomen.
- Hypoechoic and heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. In the absence of liver enzyme elevations, the liver could be within normal limits for this individual.
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

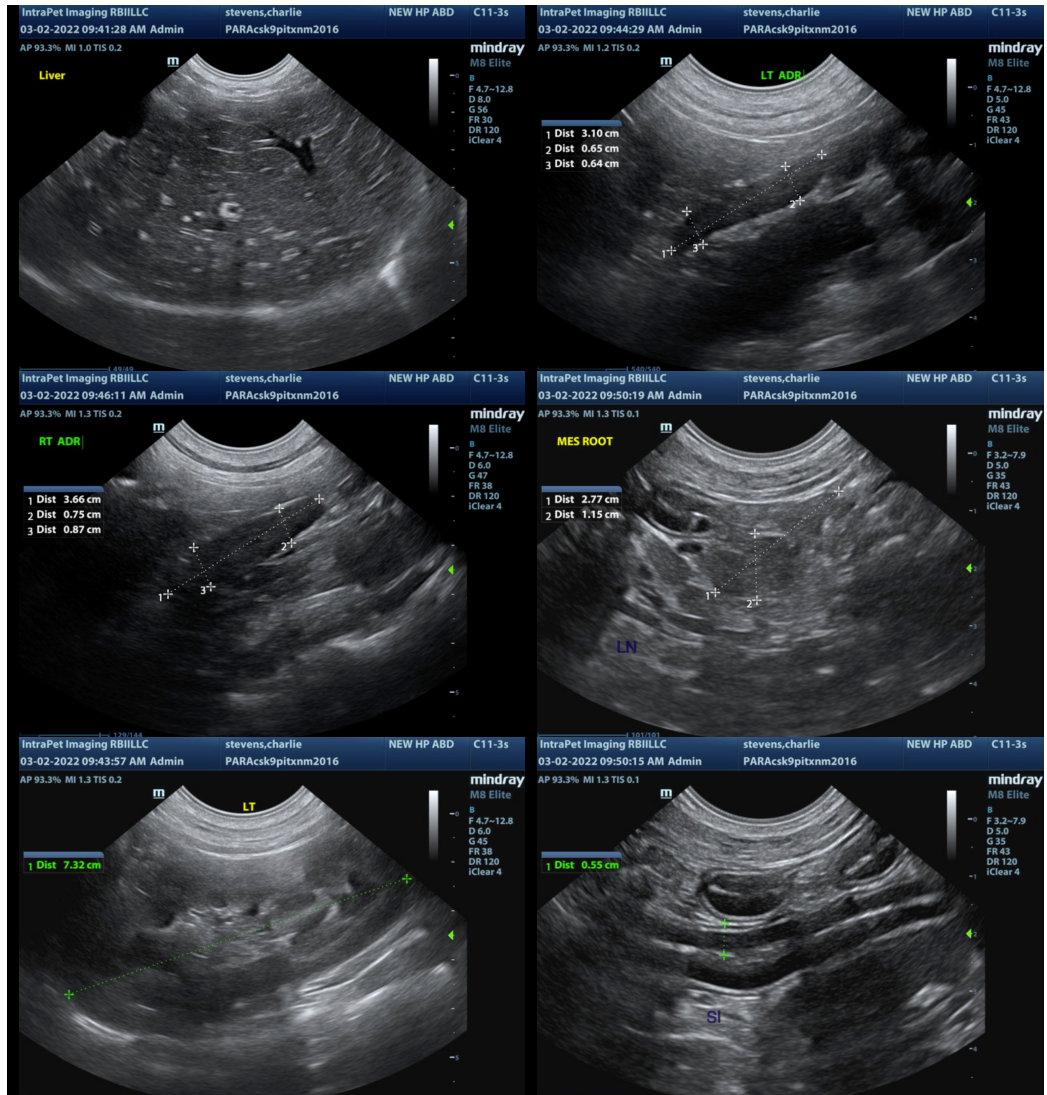
No focal lesions are visualized associated with the gastrointestinal tract to explain the vomiting reported in the history. The abnormalities reported are mild and somewhat subjective. The significance of the prominent spleen is not clear. A fine needle aspirate could be considered.

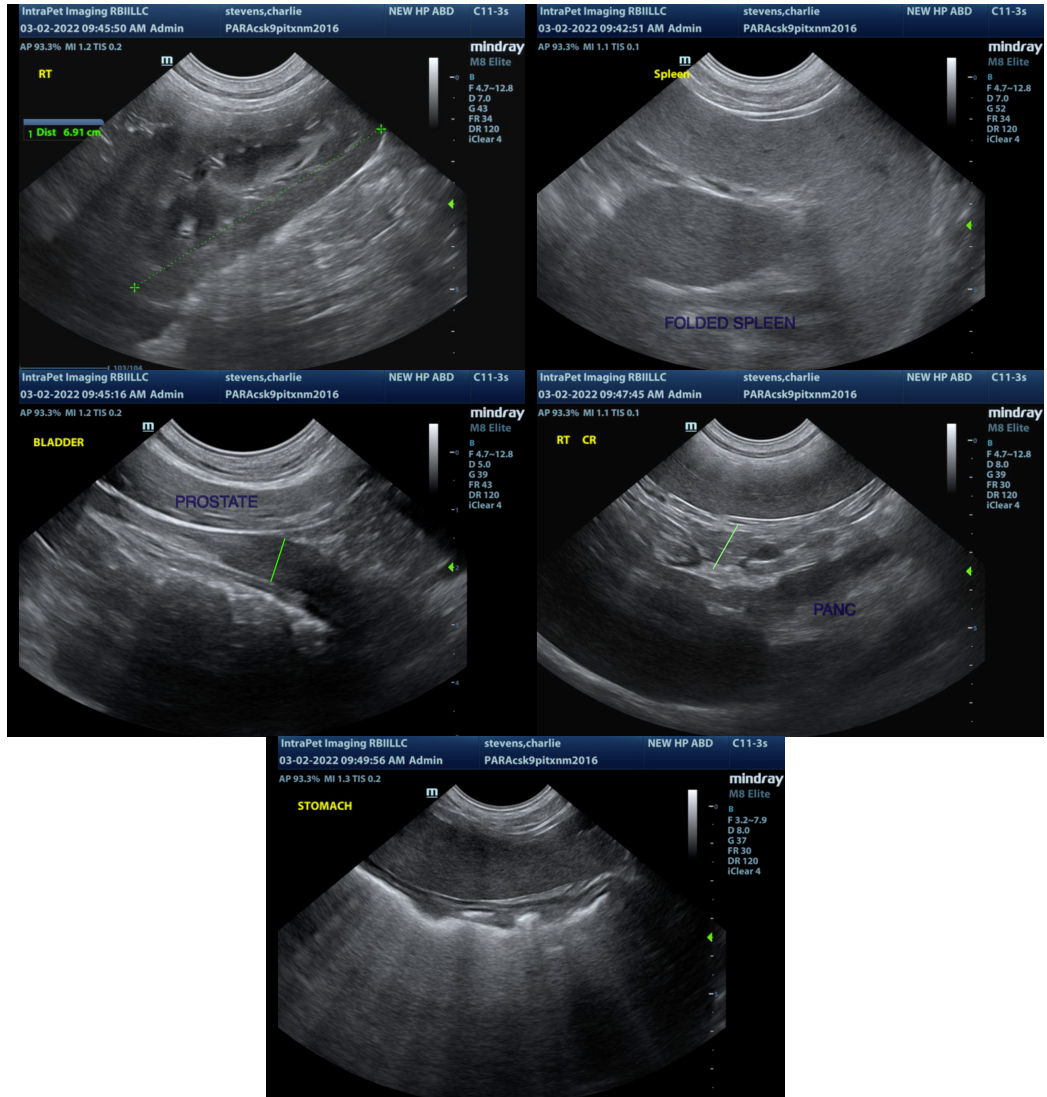
Consider possible metabolic causes for vomiting. If clinically appropriate, consider screening for Addison's disease, and consider a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.

If metabolic disease is thought unlikely, then primary GI disease such as dietary intolerance/food allergy, GI parasitism, dietary indiscretion, IBD, and less likely intestinal neoplasia are possible.

- Consider a hydrolyzed protein or novel protein prescription diet.
- Recommend chronic probiotic therapy.
- Recommend the above mentioned GI panel.
- If symptoms persist despite these measures, consider obtaining GI biopsies.

Recommend 3-view thoracic radiographs to evaluate the esophagus and to look for concurrent intrathoracic disease.





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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