

**DATE PRESENTING CLINICAL SIGNS**

4/6/22

This morning the appreciate a small amount of food. The patient is usually very food motivated and eats all of the food. After the patient eat the food about an hour and a half the patient vomited up the entire meal. The owner ran out the patient went outside and was eating grass and was throwing up grass. The patient had explosive watery bloody diarrhea. There is no history of eating table food or foreign body.

**PATIENT**

Buster Ward

Current Medications: Buprenorphine, Unasyn, Provable, Metronidazole, Protonix.

Lab Results: See attached.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Boxer

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

Neutered Male

**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.

**AGE**

4/5/13

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

**WEIGHT**

70.4 Pounds

The left kidney has a normal shape and size (8.13 cm). 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, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

The right kidney has a normal shape and size (6.57 cm). 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, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.88 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.

**HOSPITAL NAME**

Animal Emergency  
Hospital

The right adrenal gland is normal in size measuring 0.79 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.

**REFERRING VET**

Dr. Roper

**Spleen**

The spleen is subjectively normal 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.

**INVOICE**

36777

**Liver**

The liver is subjectively normal in size, and echogenicity 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. There is a 1.04 cm cystic structure visualized within the hepatic parenchyma.

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 is moderately dilated with fluid. 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 significant diffuse fluid distension. Wall thickness is normal, measuring approximately 0.35 cm with intact wall layering. 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. All areas of colon are observed to be fluid dilated with no formed fecal material. 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***

There is a small amount of free abdominal fluid. The omentum is generally of increased echogenicity. There are large lymph nodes visualized at the mesenteric root, measuring 1.93 cm x 5.97 cm and 2.51 cm x 0.87 cm.

## **PRIMARY FINDINGS**

- Moderate fluid distention of the stomach. Findings could be consistent with ileus, recent large drink of water, or an obstructive process (none observed).
- Diffuse fluid dilation of the small intestine. No focal obstructions are visualized. The findings would be most consistent with diffuse enteritis or less likely multiple foreign bodies.
- Diffuse colonic fluid distention – Findings are most consistent with the acute diarrhea described in the history.
- Moderate mesenteric lymphadenopathy – The moderate mesenteric lymphadenopathy could be concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, etc). A fine needle aspirate with cytology is recommended for further evaluation. This lymph node enlargement could also be reactive secondary to the acute diarrhea episode.
- Small volume free abdominal fluid

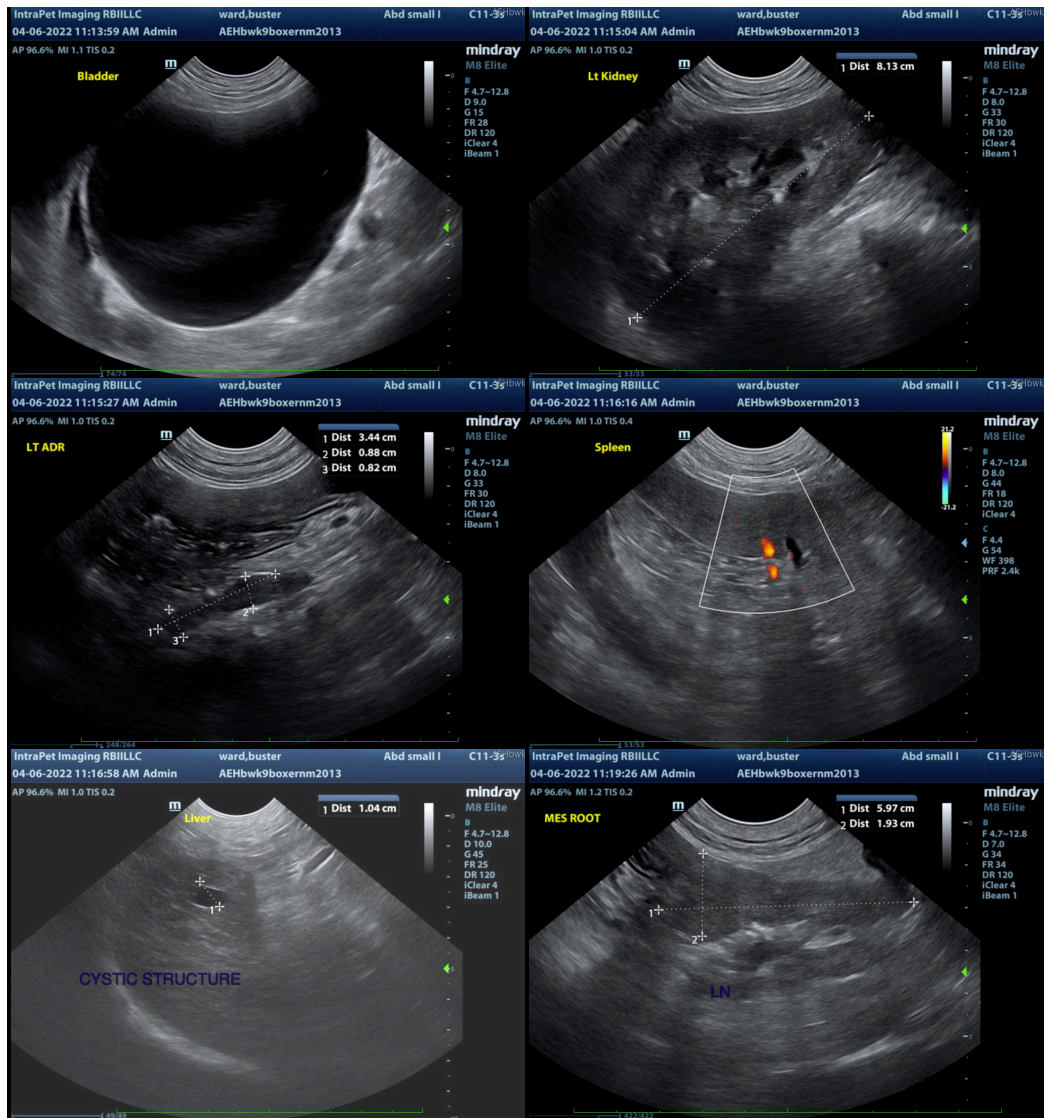
## **SECONDARY FINDINGS**

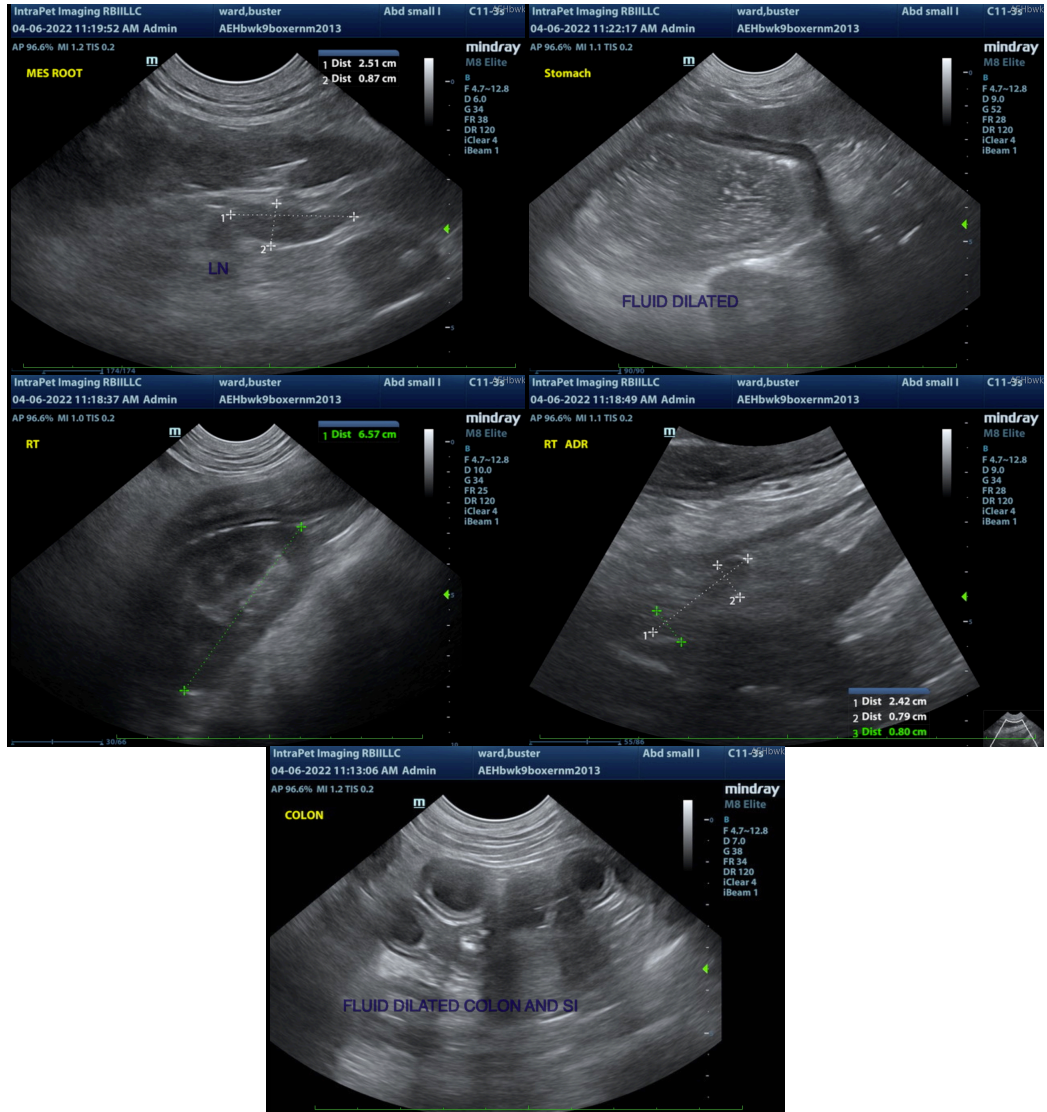
- Heterogeneous liver with a small cystic structure – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. If liver enzymes are not elevated, this could be an incidental finding. The cystic structure is likely a benign hepatic cyst, but should be monitored.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The general impression of the gastrointestinal tract is that of fluid distention and dilation with no focal lesions observed. These findings would be most consistent with a diffuse enteritis due to dietary indiscretion, bacterial or viral disease, etc. Based on the history, a severe hemorrhagic gastroenteritis would be possible. Recommend intensive support for an acute gastroenteritis with continued monitoring of albumin levels and serial imaging. I do not strongly suspect a foreign body, but this cannot be completely excluded.

The mesenteric lymph nodes are very enlarged. This could be reactive secondary to the severe gastrointestinal inflammation occurring. If this is not resolving, consider a fine needle aspirate. Consider a recheck of these lymph nodes several weeks after complete resolution of the GI signs.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com