

**DATE PRESENTING CLINICAL SIGNS**

2/2/22

History: p presented 12/2/21 for abdominal sensitivity and acute vomiting. exam was unremarkable at the time. P was sent home with Metronidazole to treat for potential gastroenteritis. P presented on 1/20/22 for same problem. Owner states that the vomiting has resolved and abdominal discomfort is intermittent. Exam was unremarkable.

PATIENT

Ripley Fowler

SPECIES

Canine

BREED

Pit Bull Terrier

SEX

Spayed Female

AGE

6/22/16

WEIGHT

58.7 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**IMAGING PERFORMED BY**Stephanie Pearce
RDCS, RVT**HOSPITAL NAME**

Northwind AH

REFERRING VET

Dr. Wilson

INVOICE

35400

Current Medications: 12/2/21 Metronidazole 500mg : 1 tab PO BID.

Radiographs: NSF.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

The patient was reported to have last eaten at 7pm the day before the ultrasound.

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.

The right kidney is normal in size (6.14 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.

The left kidney is normal in size (6.67 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.

Adrenal Glands

The right adrenal gland is normal in size (2.8 cm long x 0.54 cm at the cranial pole and 0.68 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.79 cm long x 0.62 cm at the cranial pole and 0.65 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

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

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder 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. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. The pylorus contains echogenic, non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. 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 peritoneal effusion. There is no apparent lymphadenopathy.

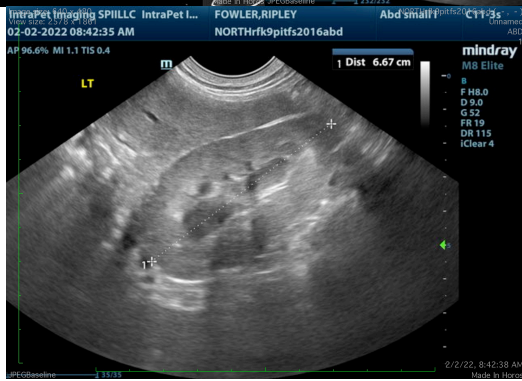
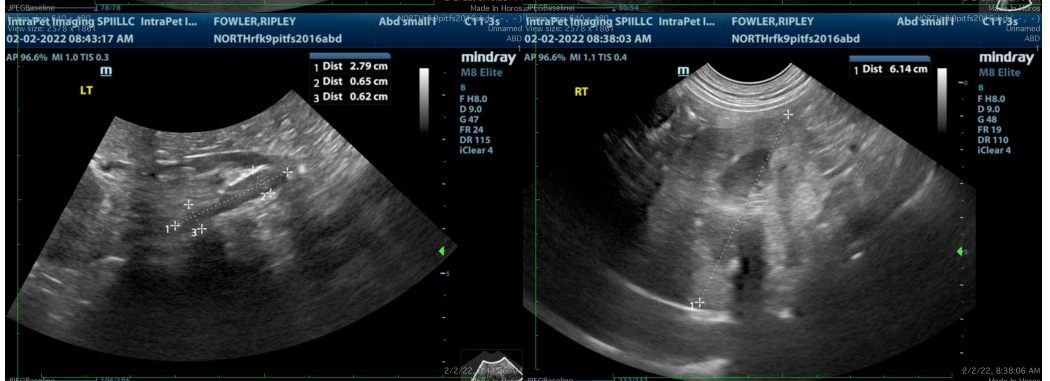
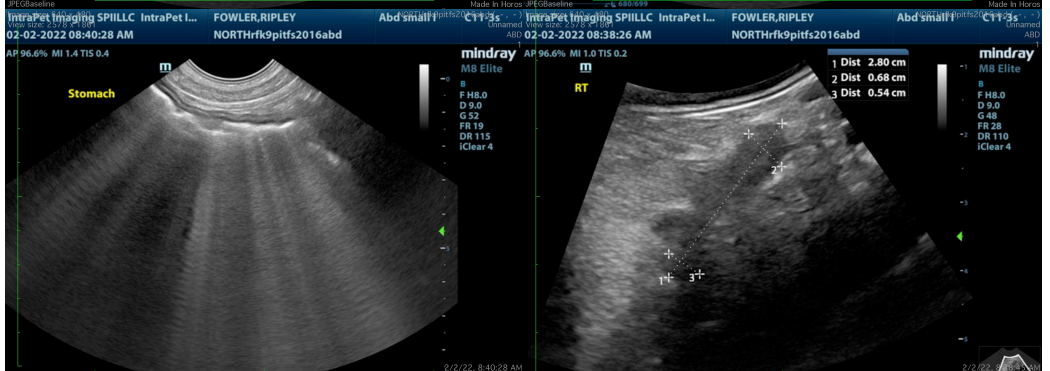
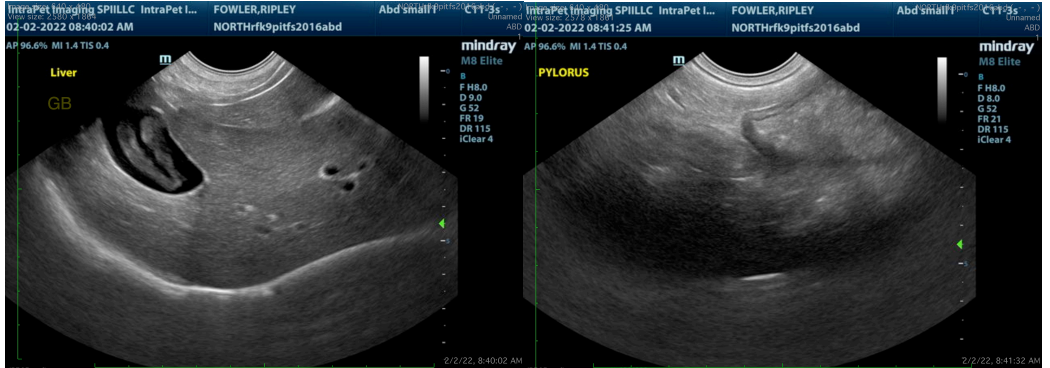
ULTRASONOGRAPHIC FINDINGS

- Hyperechoic hepatomegaly- most consistent with benign steroid (endocrine) hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely.
- 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 mild liver and gallbladder changes, if lab work including a CBC, serum chemistry panel, electrolytes and urinalysis have not been performed recently, they are recommended for further assessment of the liver and gallbladder. Recheck imaging of the stomach is recommended if and when the stomach can be completely empty to rule out possible pathology obscured by the gas and/or potential pyloric outflow obstruction, which is not considered likely given the intermittent clinical signs, but is still possible given the gastric distention in this study.

In the meantime, consideration is given to inflammatory bowel disease or food sensitivity, and recommendations for that include a gastrointestinal malabsorption panel to include PLI, TLI, folate and cobalamin to Texas A&M GI laboratory for further assessment of the GI tract and pancreas, and a diet change to a novel or hydrolyzed protein diet in the meantime. Probiotic may also be considered as empirical therapy for overall bowel health to potentially reduce gas and the consequent discomfort. If liver enzymes are increased, a fine needle aspirate of the liver is recommended 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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com