

**DATE**

6/29/22

**PRESENTING CLINICAL SIGNS**

History: Patient has long history of vomiting at home (more than a year). Presented on 6/23 for vomiting blood. No food in the vomit, discussed referral for scope, wants to perform ultrasound first.

**PATIENT**

Abbie Mears

Current Medications: Omeprazole 5mg BID.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Pearce RDCS, RVT.

**SPECIES**

Canine

**BREED**

Yorkie Mix

**SEX**

Spayed Female

**AGE**

6/27/16

**WEIGHT**

14.4 Pounds

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**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.

Left kidney is normal is size (4.15 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.

Right kidney is normal is size (4.01 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**

Left adrenal gland is normal in size (1.6 cm long x 0.33 cm at cranial pole and 0.37 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.7 cm long x 0.43 cm at cranial pole and 0.39 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

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.

**HOSPITAL NAME**

Northwind AH

**REFERRING VET**

Dr. Jones

**Liver**

Liver is subjectively small in size with a normal smooth curvilinear peripheral contour. Parenchyma is mildly hypoechoic in echogenicity with an appropriately mildly coarse and homogeneous echotexture. No focal lesions are observed. The visible biliary tree appears normal without distention or congestion. The portal vasculature is difficult to fully assess in these images.

**INVOICE**

16394

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 visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. 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. 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 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***

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

## **ULTRASONOGRAPHIC FINDINGS**

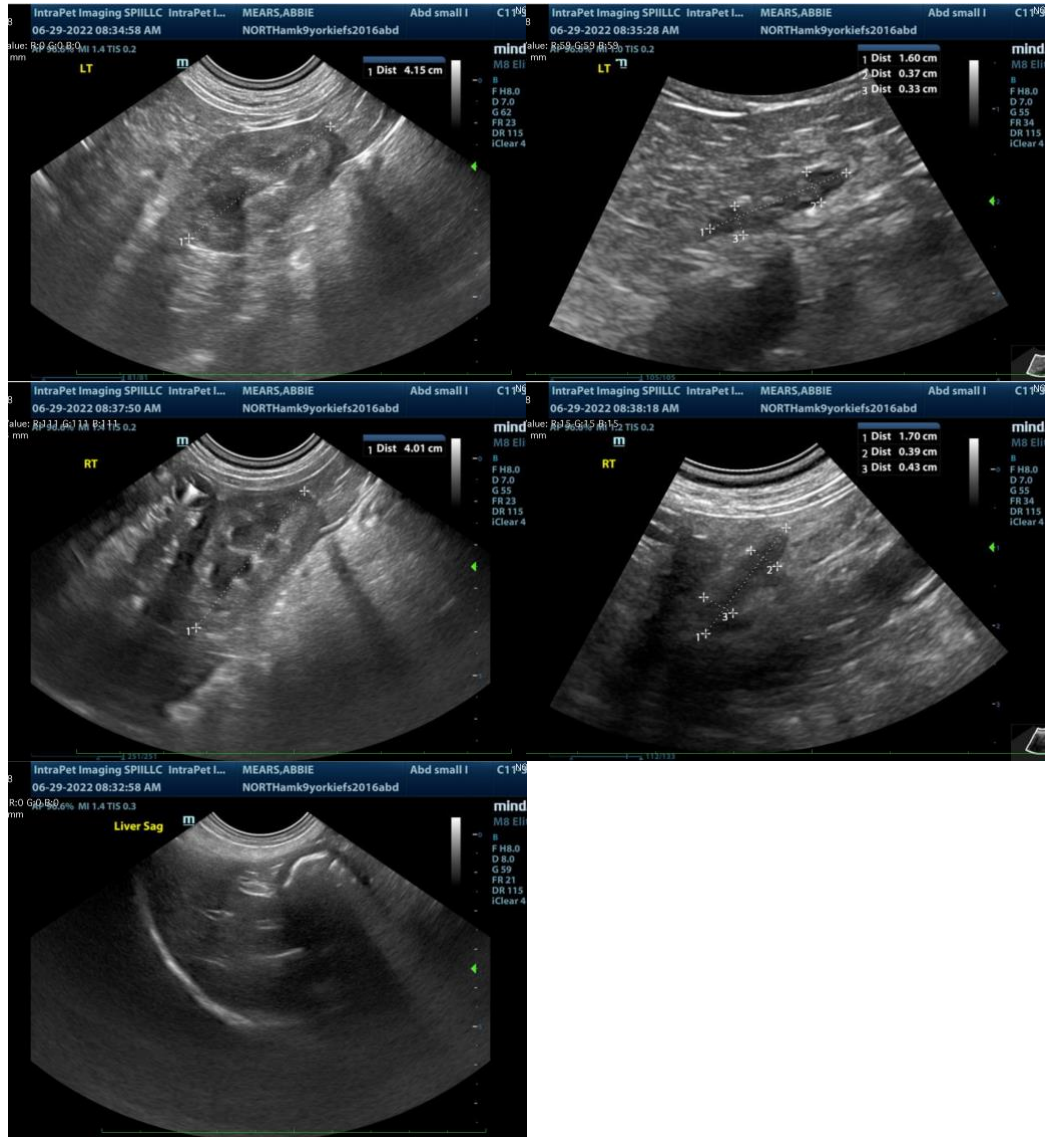
- A subjectively small, slightly hypoechoic liver. Rule out normal patient variant versus vascular anomaly, given patient signalment, such as an extrahepatic portosystemic shunt, not visible in these images, but cannot be definitively ruled out.

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

Recommendations for this patient:

1. Bile acids is recommended if not recently evaluated and if bile acids are abnormal, follow up imaging with either color flow doppler via ultrasound in the area of the portohepatis and/or an abdominal CT scan is recommended for further evaluation of a possible portosystemic shunt.
2. Coagulation panel is recommended given the reported hematemesis
3. 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 with an add-on baseline cortisol with recommendations to follow up with a full ACTH stimulation test to rule out hypoadrenocorticism, if the baseline cortisol is <2.
4. In the meantime, empirical deworming with a 5-day course of Panacur, as well as gastric protectants, including Omeprazole twice per day and Sucralfate and antiemetics are recommended.

Ultimately, if the above mentioned recommendations don't result in a diagnosis and/or a change in plan, endoscopy, as is reportedly being discussed, is appropriate.



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