

**DATE**

6/27/22

**PRESENTING CLINICAL SIGNS**

Acute vomiting/regurgitation, suspect secondary to stress/anxiety. Reviewed labs: mild liver change, suspect secondary to gastroenteritis.

**PATIENT**

Isabella Goodman

Current Medications: Admin: Metronidazole 5mg/ml- 14ml IV (eb)

1:20pm- admin: Ampicillin 250mg/ml- 100 mg= 0.4 ml IV (eb)

Cerenia 10mg/ml- 4.5 mg= 0.45 ml IV (eb)- switching to oral meds today if indicated.

Lab Results: hch17/cbc: ALT 270, ALKP 223, GGT 14, pcv 55

Radiographs: lateral/VD chest/abd: NSF. AFAST: gas in stomach, intestines wnl, difficult to assess liver/pancreas.

**SPECIES**

Canine

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.

**BREED**

Yorkie Mix

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

Spayed Female

**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.

**AGE**

12/15/20

Left kidney is normal is size (3.73 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.

**WEIGHT**

10 lbs

Right kidney is normal is size (4.0 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.

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

Left adrenal gland is normal in size (1.46 cm long, 0.48 cm at cranial pole and 0.43 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Everhart VH

Right adrenal gland is normal in size (1.94 cm long, 0.63 cm at cranial pole and 0.52 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Goodman

**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.

**INVOICE**

31260

**Liver**

Liver is subjectively small in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

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 empty with no evidence of obstruction, foreign material or infiltrative disease. 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 (< 0.2 cm) 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 or apparent lymphadenopathy noted in these images.

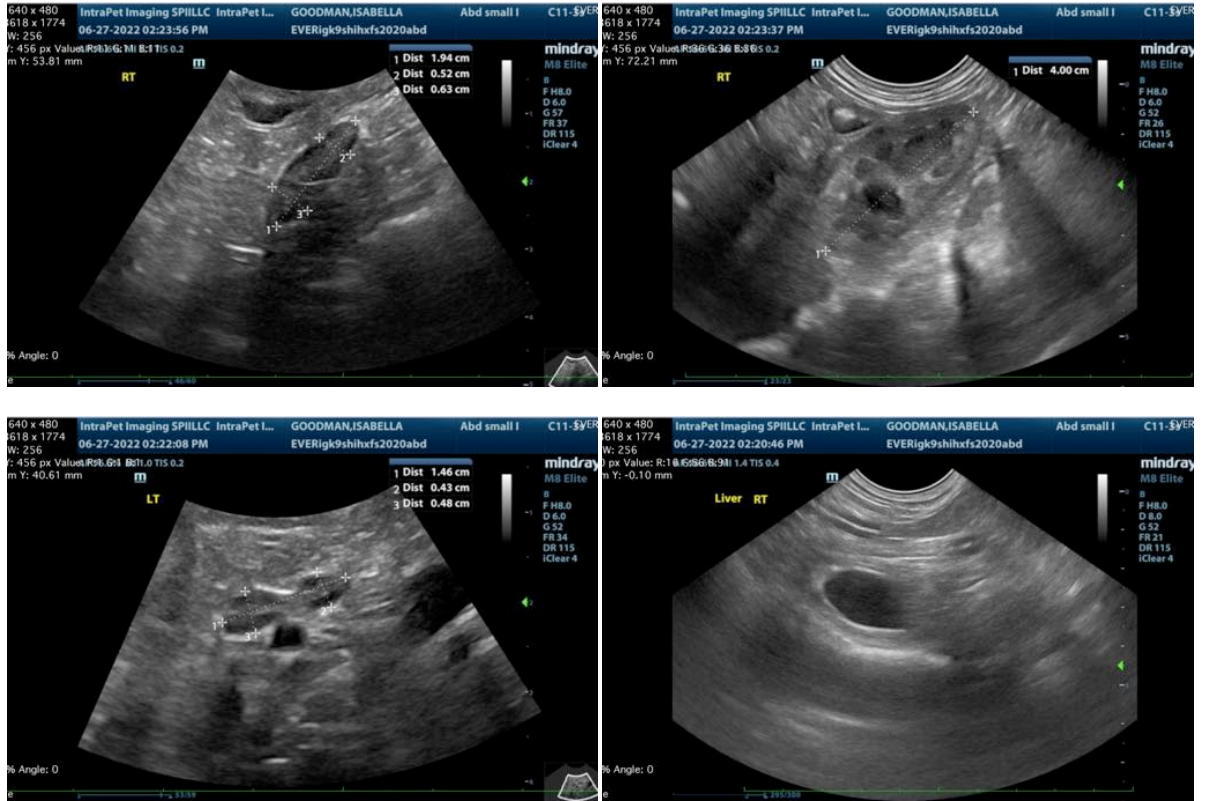
## **ULTRASONOGRAPHIC FINDINGS**

### **PRIMARY FINDINGS:**

Subjectively small liver. Rule out normal patient variant versus an extrahepatic portosystemic shunt, which cannot be ruled out. An extrahepatic portosystemic shunt is not visible in these images; however, visualization was limited by the patient.

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

1. Bile acids are recommended given the subjectively small liver and patient's signalment. If bile acids are high follow-up sedated ultrasound of the portahepatis with Doppler to fully evaluate for possible extrahepatic shunt and/or an abdominal CT scan for the same reason.
2. If bile acids are normal management of the reported gastroenteritis, empirical deworming with a 5 day course of Panacur, empirical antibiotics to manage any possible bacterial translocation to the liver from the gastroenteritis +/- hepatic nutraceuticals, etc. are all recommended with recheck of the liver enzymes for improvement versus progression.
3. In the meantime, testing for Leptospirosis can also be considered.



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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