

**DATE PRESENTING CLINICAL SIGNS**

2/10/22

**PATIENT**

Ziva Rodriguez

**SPECIES**

Canine

**BREED**

Labrador Retriever

**SEX**

Intact Female

**AGE**

5/6/21

**WEIGHT**

50.9 Pounds

**INTERPRETED BY**Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)**IMAGING PERFORMED BY**

Rachel Brillhart RDMS

**HOSPITAL NAME**

Everhart WellPet

**REFERRING VET**

Dr. Key

**INVOICE**

35591

History: Pet presented on 2/3 as new client for diarrhea. Has history since ~13 weeks of gastrointestinal issues. Was dewormed multiple times and placed on metronidazole and probiotics. Has history of finding cloth to chew on and likes to pick up everything. Owners concerned re: PICA. On 1/11, owner thought may have ingested part of fox carcass. Pet began having V/D. Pet had very increased WBC. Was treated at previous vet with metronidazole, enrofloxacin and carafate. Pet presented to ER on 1/21 for continued care as stools were improved in consistency but started having occasional streaks of blood and mucus. Repeat labs were WNL. Treated with probiotics and bland diet. Pet came in for continued soft stools with mucoid coat. Discussed with owner. Owner opt GI PCR panel that was negative. Owner opt U/S as next step.

Current Medications: Propectalin tabs since 2/3 prn  
Lab Results: Attached separately.  
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**\*\*Note: Patient movement and panting limits evaluation. If further imaging is required, sedation will likely be necessary.**

**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.

The left kidney has a normal shape and size (5.8 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.

The right kidney has a normal shape and size (6.1 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.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.58 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.

The right adrenal gland is normal in size measuring 0.58 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.

**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.

### ***Liver***

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. 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. Jejunum wall measured 0.24 cm. Duodenum wall measured 0.32 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

### ***Other***

The left and right ovaries are visualized and are within normal limits. The uterine body is visualized and appears normal.

## **ULTRASONOGRAPHIC FINDINGS**

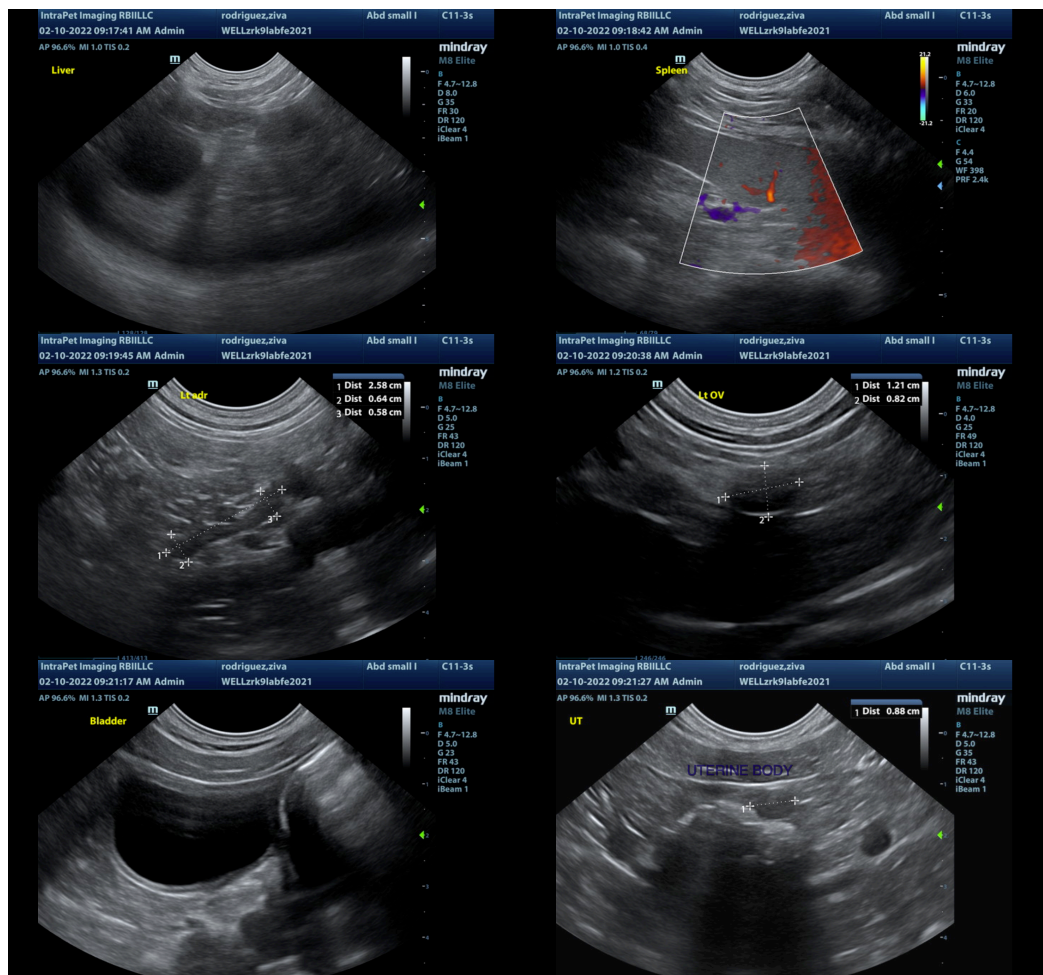
- No significant ultrasonographic lesions visualized

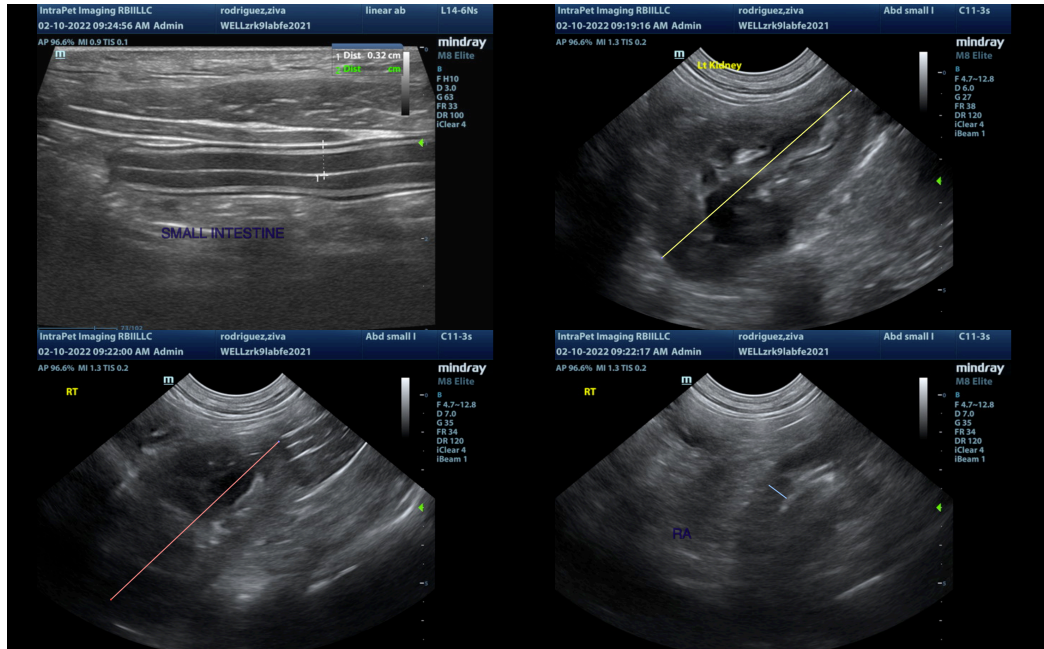
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No focal bowel or pancreatic lesions were observed on today's scan. This can be a common occurrence, as there are many causes for diarrhea that cannot be diagnosed by ultrasound alone.

Based on the history, there is a component of large bowel diarrhea. I am not certain based on the history, but suspect there is some evidence of small bowel diarrhea as well (?). This can be a challenge with a mouthy puppy who is ingesting foreign material, and it can be difficult to determine if the initial cause of the diarrhea (dietary indiscretion, etc.) is still the cause of diarrhea, or if there could be dysbiosis, etc. at this point (due to the need for systemic antibiotics).

- Consider metabolic causes for diarrhea. Baseline bloodwork appears relatively normal. Consider screening for Addison's disease, and recommend a GI panel to Texas A&M with a PLI, TLI, cobalamin and folate to look for evidence of exocrine pancreatic insufficiency, dysbiosis, etc. If there is any concern for liver dysfunction or portosystemic shunt, then pre- and post-prandial bile acids can be considered.
- If metabolic causes for diarrhea are unlikely, then consider primary GI causes in a young dog, that would most likely include dietary intolerance, dietary indiscretion, foreign material, GI parasites, pancreatitis, and acute colitis/gastroenteritis.
- Consider a novel protein/hydrolyzed protein prescription diet. You can play with added fiber. This can help some dogs with large bowel diarrhea, but it can make some dogs worse.
- Recommend chronic probiotic therapy.
- If foreign material ingestion cannot be prevented, consider a basket muzzle on walks or when not directly monitored.
- If dietary modification and chronic probiotic therapy do not help, you could consider fecal transplant if dysbiosis is thought likely. Additionally, a colonoscopy +/- upper GI endoscopy could be considered.





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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