

**DATE PRESENTING CLINICAL SIGNS**

8/17/21

Bloody Diarrhea

**PATIENT**

History: Date: 08-14-2021 Notes: PC: Patient started having bloody diarrhea this past Wednesday. Patient vomited yesterday and did not eat. Patient had large amount blood stool this morning and has been lethargic. Patient gets Cerenia periodically. Called rDVM; prescribed Metronidazole and probiotic.

Lola Merklinger

**SPECIES**

Canine

Current Medications: Metronidazole Tablets 250mg, Sucralfate Tablets 1gm, Maropitant Citrate (Cerenia) Tablets 16mg, Omeprazole Capsules 10mg

Lab Results: Attached

Date of Previous IntraPet Ultrasound: No previous

Sedation: not needed

Stat Report: not requested

**BREED**

Shetland Sheepdog

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

Spayed Female

**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**

2017

The left kidney has a normal shape and size (4.27 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.

**WEIGHT**

14.2 Pounds

The right kidney has a normal shape and size (3.62 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)

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.62 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 0.68 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. Goessling

**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**

24769

**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. The wall appears thickened and hypoechoic with the reduction of normal layering. Wall measurements vary from 0.5-0.71 cm (less than 0.7 cm is normal) with some variability due to the presence of rugal folds. No focal mass lesions were observed. The mesentery surrounding the stomach wall appears very hyperechoic and inflamed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Jejunum wall measured 0.28 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 liquid fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with moderate pancreatitis.

### ***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 generally increased echogenicity surrounding the stomach.

## **ULTRASONOGRAPHIC FINDINGS**

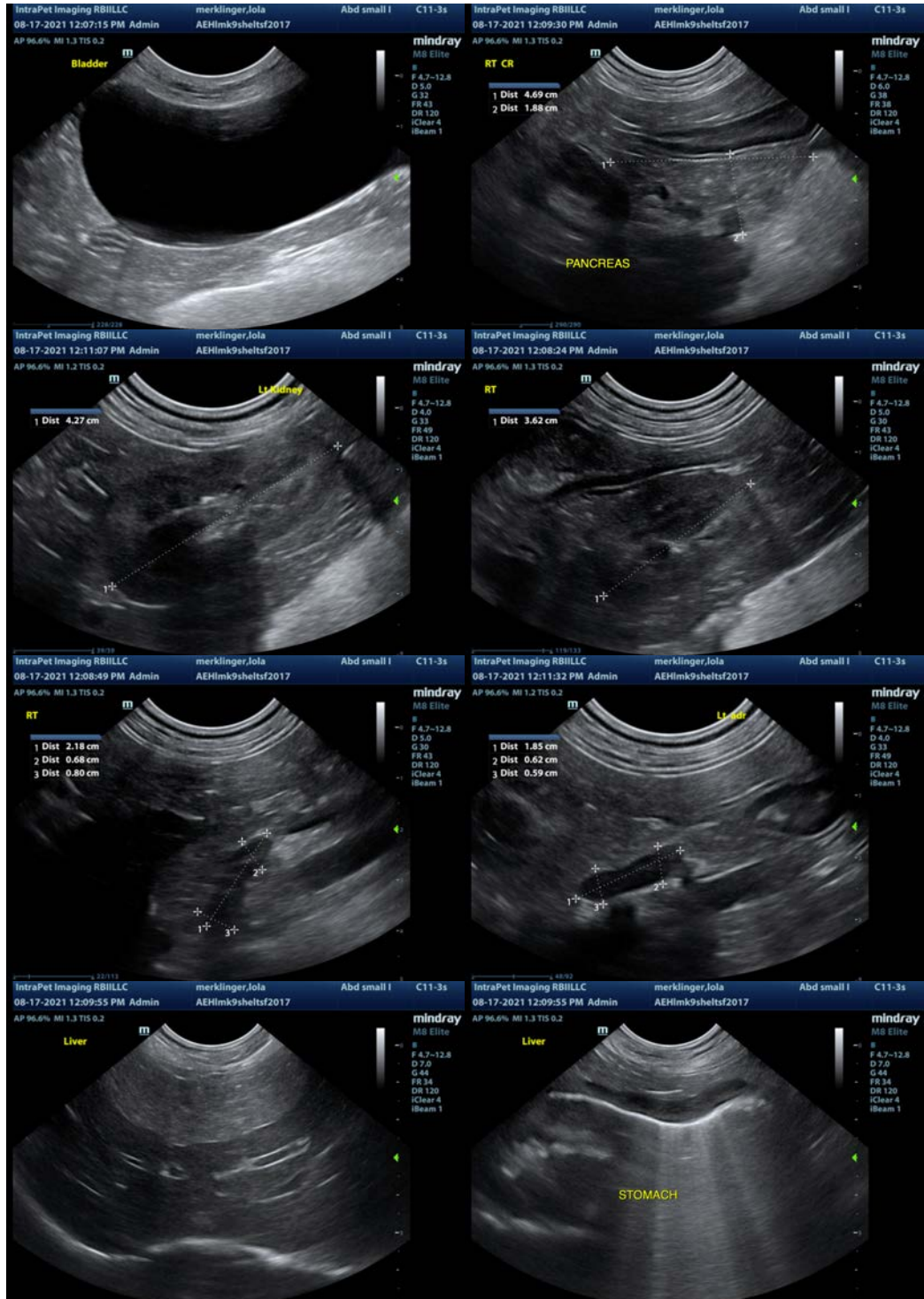
- Thickened gastric wall with reduced distinction of layering – The stomach wall thickening could be consistent with inflammation, edema, infiltrative neoplasia, imaging artifact due to rugal folds, other.
- Subjective thickening of the small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Hypoechoic pancreas with surrounding hyperechoic mesentery – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.

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

The area of the stomach appears very inflamed and the stomach wall appears somewhat thickened and hypoechoic. This could be consistent with gastritis, GI ulceration, or infiltrative disease such as neoplasia, fungal disease, etc. (seems less likely). The small intestine appears mildly thickened with no focal lesions, and there is liquid fecal material within the colon. If initial workup has ruled out metabolic causes (including Addison's disease), then consider primary gastrointestinal disease such as GI parasitism, dietary indiscretion, mild pancreatitis, bacterial dysbiosis, food allergy, IBD, and less likely intestinal neoplasia.

If primary GI disease is suspected in young patients with acute signs, I would most strongly consider dietary indiscretion, ingestion of foreign material, GI parasitism, Addison's disease and pancreatitis, acute colitis/gastroenteritis. Serial radiographs for evaluation of progressive obstruction/partial obstruction/foreign material is warranted.

Recommend symptomatic therapy and close monitoring, if symptoms persist, re-evaluate and consider surgery/endoscopy to obtain biopsies and evaluate for foreign material.





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.

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