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**DATE PRESENTING CLINICAL SIGNS**

1/7/22

History: O moved from Fells point to County in 12/2020. Never had GI issues. Gastritis from eating weed in yard started in 4/2021. O cut it down. Protein losing enteropathy diagnosed at urgent care 8/2021. He had pitting edema. He was diagnosed with hookworms and roundworms. Dewormed w/ strongid. PLE persisted and fecal tested positive for roundworms again 10/27 with high burden count. Dewormed w/ Panacur. Was placed on GI diet, prednisone and Provable probiotic. Has been doing great and up until last weekend. Flatulent, then diarrhea and vomited once, two days ago. Still has a good appetite but loose stool persists and is lethargic.

**PATIENT**

Bruiser Gutridge

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Neutered Male

**AGE**

1/15/14

**WEIGHT**

59.6 Pounds

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**HOSPITAL NAME**

Belvedere Vet Center

**REFERRING VET**

Dr. Almstalden

**INVOICE**

34085

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**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 visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (5.58 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 (6.22 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 0.59 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 0.55 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. Duodenum wall measured 0.50 cm. Jejunum wall measured 0.37 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***

Scant anechoic free fluid is visualized. No lymphadenopathy. The omentum appears generally of increased echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

- General increase in echogenicity of the omentum – Findings are consistent with generalized inflammation. No obvious source is identified.
- Scant free of abdominal fluid

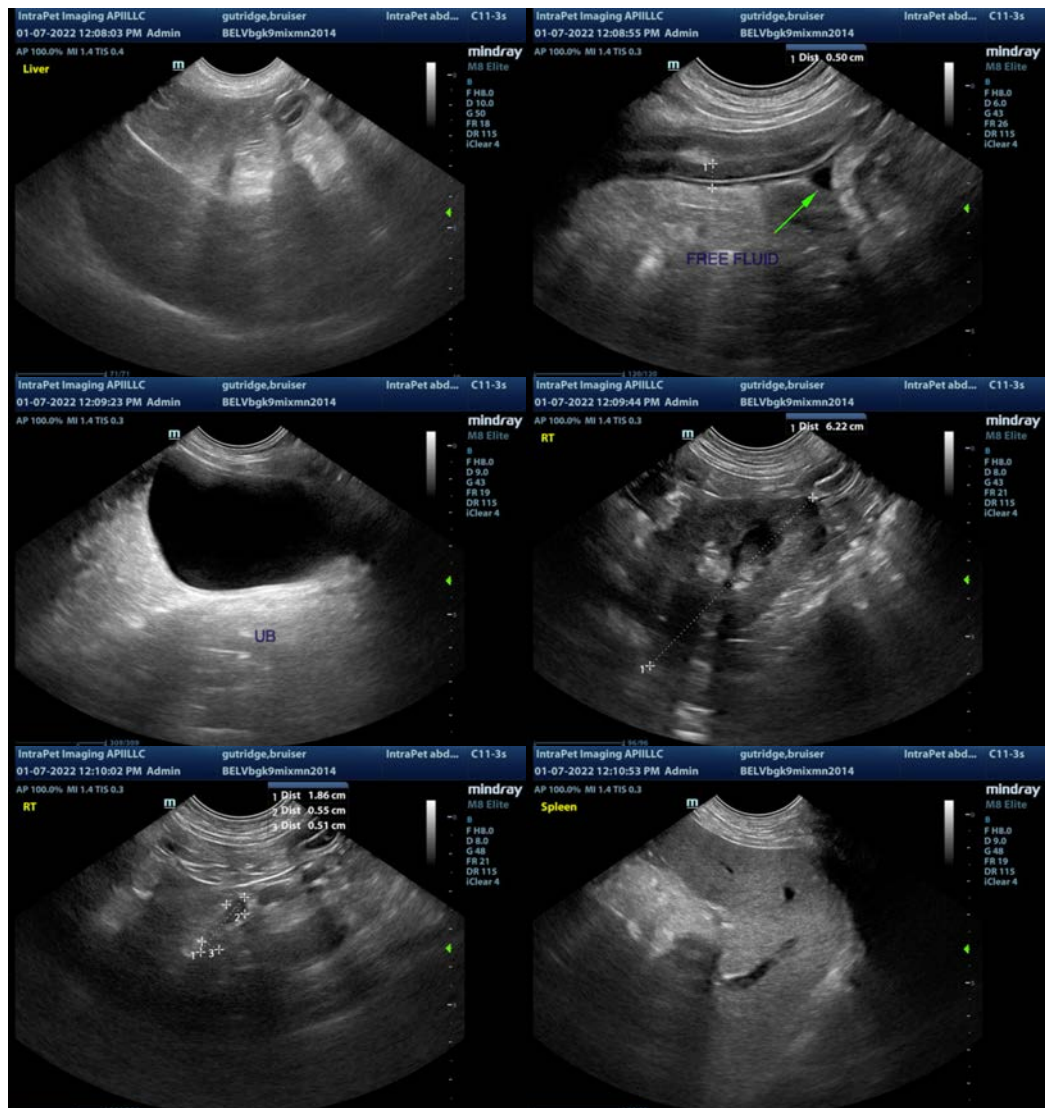
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

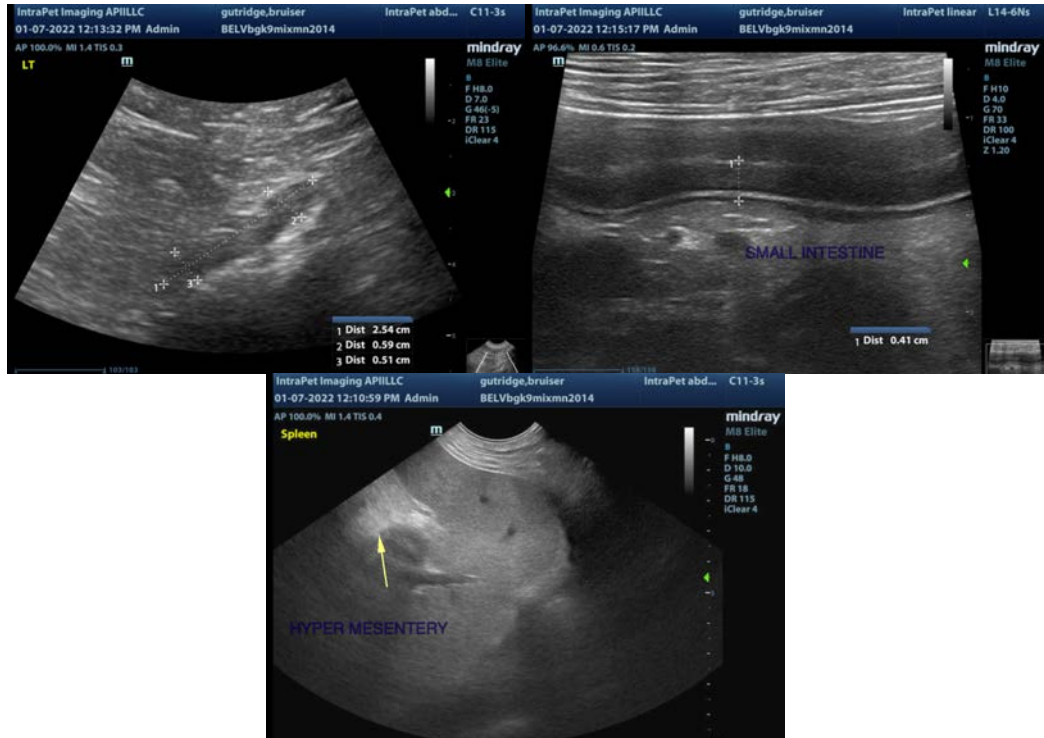
Today's scan is relatively normal. No focal lesions associated with the GI tract are visualized. There is a general impression of hyperechoic mesentery and generalized inflammation. No source is readily identified. Given the history, it's important to get a current picture of what is going on, and try to determine if this is truly a PLE dog(?), a dog with chronic/recurrent parasitism(?), etc. This steroid protocol is atypical, and it would be nice to determine if it is truly necessary. I have seen dogs with recurrent parasitism (particularly hookworms), which are likely encysted in the tissues and relapse with regularity. These dogs need to be monitored closely and treated routinely, as well as treating the environment.

- Recommend full baseline bloodwork including urinalysis, and if protein levels are low, recommend a urine protein/creatinine ratio and a liver function test (pre- and post-prandial bile acids).
- Recommend a GI panel to Texas A&M with a qualitative PLI, TLI, cobalamin and folate to further evaluate for possible pancreatic inflammation not visualized on today's scan and to evaluate the

general GI health.

- Recommend comprehensive fecal screen to evaluate for GI parasites.
- Recommend continued chronic probiotic therapy if not currently doing this.
- As I am unsure of the etiology of this process, making a dietary recommendation can be difficult, but a hydrolyzed protein or novel protein prescription diet could be considered. Additionally, a low-fat diet can be helpful in these situations.
- Consider screening for atypical Addison's disease with either an ACTH stimulation test or a baseline cortisol.
- If symptoms are persisting, particularly if chronic hypoalbuminemia is present, then recommend referral for possible endoscopic GI biopsies.





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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