



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Rover Bogart	Diagnosed with protein losing enteropathy in 2021 - u/s done, hypoalbuminemia. Has been doing okay with diet and meds. Beginning of October 2022 we saw him for zero appetite, vomiting on and off and lethargic. Significant weight loss. Ran bloodwork which was not as bad as expected, O mentioned stools getting soft again. Dexamethasone and cerenia given in clinic, seem to gradually increase appetite but still not 100% O elected for ultrasound to see how everything compares to 2021 (u/s done at Manitou) meds: Ondansetron 8mg SID, 187.5 mg metronidazole BID, 10 mg omeprazole SID
<b>SPECIES</b>	
Canine	
<b>BREED</b>	
Kooiker Hondje	Abnormal PE/Chem/CBC/UA Results: From October 2022 - ALT 128, ALKP 239, CPL abnormal
<b>SEX</b>	
MI	
<b>AGE</b>	
11 years	
<b>WEIGHT</b>	
12.6 kg	
<b>INTERPRETED BY</b>	
R. McKenzie Daniel, DVM, DABVP	
<b>IMAGING PERFORMED BY</b>	
Kelly Reschny	
<b>HOSPITAL NAME</b>	
Buck AH	
<b>REFERRING VET</b>	
Dr. Sommers	
<b>INVOICE</b>	
15208	
<b>DATE</b>	
10/13/22	
	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
	<b>Urinary System</b>
	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.
	The prostate gland was normal, measuring 1.4 cm in diameter.
	The area of the aortic trifurcation was free of pathology.
	Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 3.9 cm in length. The right kidney measured 5.8 cm in length.
	<b>Adrenal Glands</b>
	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.4 cm length x 0.50 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.9 cm length x 0.43 cm width at the caudal pole.
	<b>Spleen</b>
	The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.
	<b>Liver/ Gallbladder</b>
	The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a



<b>PATIENT</b>	mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with mild, hyperechoic, nonorganized gallbladder debris. The cystic and common bile ducts were normal. No evidence of gallbladder or peripheral gallbladder inflammatory criteria was noted.
Rover Bogart	
<b>SPECIES</b>	
Canine	<b>Gastrointestinal</b>
<b>BREED</b>	The stomach presented intact subtly prominent wall layering. The lumen of the stomach was empty with mild luminal gas. The ventral gastric body wall width measured 0.54 cm. No signs of obstruction or foreign material was noted.
Kooiker Hondje	
<b>SEX</b>	The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of mechanical / metabolic small intestinal ileus, obstruction, or foreign material. Intermittent, discrete hyperechoic intestinal mucosal speckling was noted. The duodenum wall measured 0.40 cm width. The jejunum wall measured 0.32 cm width.
MI	
<b>AGE</b>	Normal visible colon wall layers were present with subjective formed to semi formed fecal matter.
11 years	<b>Pancreas</b>
<b>WEIGHT</b>	The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.
12.6 kg	<b>Free Abdomen</b>
	No overt lymphadenopathy or evidence of peritoneal effusion was present.
<b>INTERPRETED BY</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
R. McKenzie Daniel, DVM, DABVP	<ul style="list-style-type: none"> <li>• Benign hepatopathy</li> <li>• Mild gallbladder debris (non mucocele)</li> <li>• Mild heterogeneous pancreas - age-related pancreatic changes, minor remodeling owing to previous inflammatory episode, low-grade to chronic pancreatitis, all possible, no evidence of active pancreatitis</li> <li>• Suspect mild gastritis</li> <li>• Intact small bowel walls exhibiting intermittent mild mucosal speckling</li> </ul>
<b>IMAGING PERFORMED BY</b>	
Kelly Reschny	
<b>HOSPITAL NAME</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Buck AH	Overall, no overt evidence of significant gastrointestinal pathology. Sonographically, the appearance of the small intestine is likely consistent with previous diagnosis of protein-losing enteropathy. Some or all of the following protocol in addition to current GI support may be considered. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.
<b>REFERRING VET</b>	
Dr. Sommers	<b>OBJECTIVE: keep albumin levels &gt; 2 g/dl, avoid thromboembolism and cavitory effusions, monitor concurrent PLN (Wheaton Terrier PLE/PLN) and liver disease:</b>
<b>INVOICE</b>	<b>Plasma</b> 10 mL / kilogram IV over 4 hours
15208	Or <b>Human albumin</b> 2 ml/kg/h over 10 hours. Total daily volume 20.l/kg/day
<b>DATE</b>	<b>And Colloids/Hetastarch</b>
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**INVOICE**

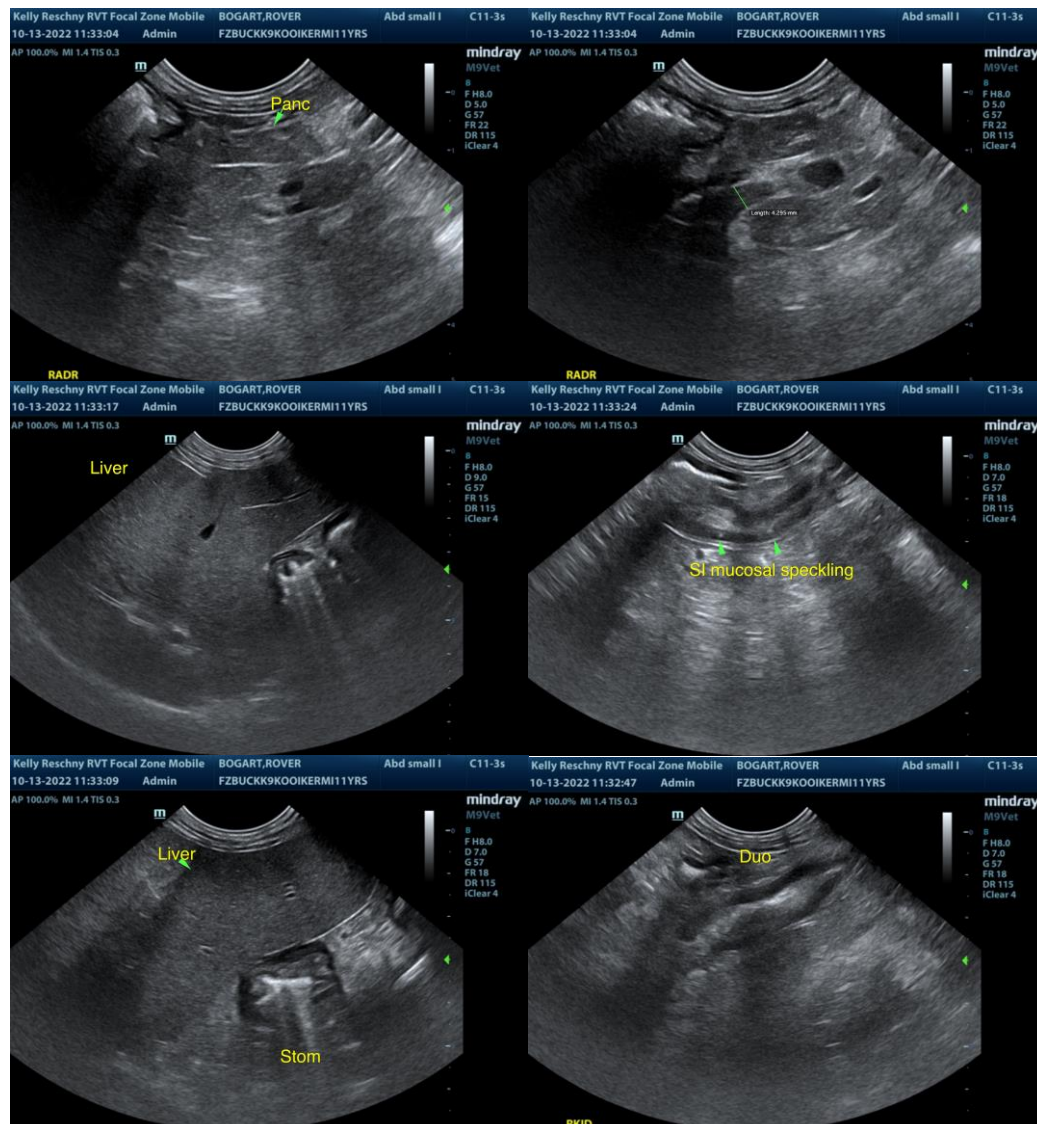
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10 to 20 mL per kilogram per day and dogs  
10 to 15 mL per kilogram per day cats  
(Can bolus first 1/3 of dose over 15 minutes)  
& maintain on LRS maintenance otherwise.

**Metronidazole** (10-20 mg/kg po bid)  
**Famotidine** 1 mg/kg lv 1m po dc Sid /bid  
**Sucralfate** 0.5-1 g po tid dogs, 0.5 g bid cats in slurry **Or Misoprostol** 1-5 ug/kg po tid  
**Diet:** Highly digestible high quality protein, low fiber, low fat diet (< 15% of dry matter). Hydrolyzed protein or novel protein. Purina HA or Royal Canine HP or similar.  
**Prednisone** or prednisolone 2 mg/kg bid x 3-5 days then 2 mg/kg sid. **Chlorambucil** in refractive severe IBD/alimentary lymphoma cases (monitor cbc for rare bone marrow suppression) 4 mg/m<sup>2</sup> Q 24-48 hours.  
**Cobalamine** (B12) 250-1500 ug/dog weekly x 6 weeks.  
**Calcium** supplementation if necessary.  
**Aspirin** 0.5-1 mg/kg/day **or Clopidrel** (Plavix) 1-5 mg/kg/day.





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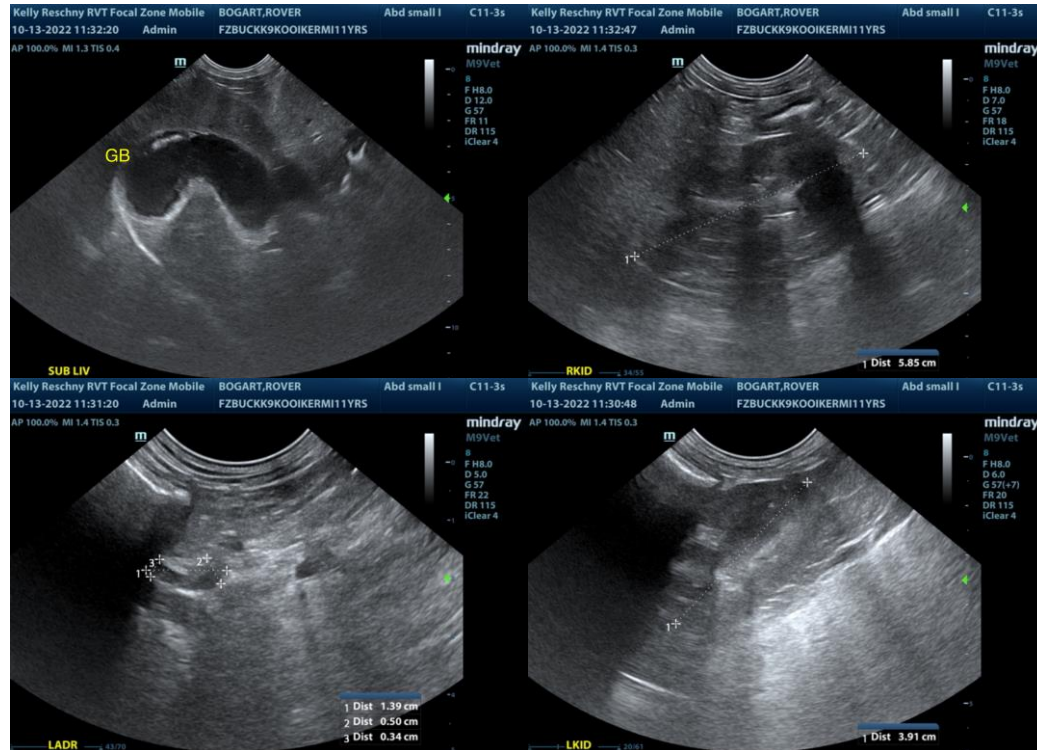
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
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