



PATIENT

Carbon Lyon

SPECIES

Canine

BREED

Border Collie

SEX

Neutered Male

AGE

3

WEIGHT

41 Pounds

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Dr. Brita Kiffney

HOSPITAL NAME

Northshore VH

REFERRING VET

Dr. Brita Kiffney

INVOICE

20651

DATE

1/19/23

PRESENTING CLINICAL SIGNS

History: Colleague saw patient last week: He presented after collapsing in the hind legs after playing fetch, recovered after 30 minutes - he had ascites.

Abnormal PE/Chem/CBC/UA Results: CBC: NI CHEM: low albumin, globulins , total protein and low calcium and low cholesterol UA: UPC is 0.1, well concentrated Pending: GI panel, bile acids

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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 were noted.

The area of the residual prostate appeared normal and free of pathology.

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 and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.0 cm in length. The right kidney measured 6.3 cm in length.

Adrenal Glands

The left adrenal gland was not definitively visualized.

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.6 cm width at the caudal pole.

Spleen

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.

Liver

The liver exhibited subjective mild enlargement. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. Overtly normal non-congested hepatic vasculature.

The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal



PATIENT	The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild nonshadowing gastric ingesta/chyme. The ventral gastric body wall measured 0.40 cm. No evidence of gastrointestinal obstructive pattern noted.
Carbon Lyon	
SPECIES	The small intestine presented intact generalized prominent wall layering with segmental mild mucosal speckling to segmental mucosal fogging. Segmental nonshadowing ingesta/chyme was present. The duodenum wall measured 0.62 cm. The jejunum wall measured 0.44 cm. No evidence of gastrointestinal obstructive pattern noted.
Canine	
BREED	The colon exhibited sonographically normal walls with generalized non-formed to soft fecal matter.
Border Collie	
	<i>Pancreas</i>
SEX	The pancreas was mildly prominent in size, exhibiting heterogeneous parenchyma with discrete hypoechoic striations.
Neutered Male	
	<i>Free Abdomen</i>
AGE	Intermittent isoechoic benign/reactive mesenteric lymphadenopathy, along with mild volume anechoic peritoneal free fluid. Generalized mild hyperechoic mesentery was noted. No omental masses were noted.
3	
	ULTRASONOGRAPHIC FINDINGS
WEIGHT	<ul style="list-style-type: none"> • Prominent yet intact gastrointestinal walls, exhibiting mild segmental mucosal speckling/mucosal fogging- strongly suggestive of PLE intestinal pattern • Prominent heterogenous to edematous pancreas- potential for low grade/chronic pancreatitis but considered a less likely differential diagnosis • Subjective mild hepatomegaly, exhibiting overtly normal non-congested hepatic vascular volume • Intermittent benign/reactive mesenteric lymphadenopathy, mild volume anechoic peritoneal effusion and generalized hyperechoic mesentery
41 Pounds	
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HOSPITAL NAME	<u>INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS</u>
Northshore VH	Even without reported gastrointestinal signs or weight loss, the intestinal appearance combined with panhypoproteinemia, hypocalcemia and hypocholesterolemia, without evidence of proteinuria or overt hepatic congestion consistent with protein losing enteropathy. IBD, lymphangiectasia, infiltrative intestinal disease are all potentials. Three view chest radiographs to assess for evidence of cardiomegaly or concurrent thoracic pathology is suggested if not done. Correlation with pending GI panel and bile acids are suggested. Peritoneal effusion analysis to correlate with suspected effusion, secondary to decreased oncotic pressure may be considered.
REFERRING VET	
Dr. Brita Kiffney	
INVOICE	PLE Therapy
20651	Part or all of this protocol may be considered based on your clinical impression of the patient:
DATE	OBJECTIVE: keep albumin levels > 2 g/dl, avoid thromboembolism and cavitory effusions, monitor concurrent PLN (Wheaton Terrier PLE/PLN) and liver disease:
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Plasma 10 mL / kilogram IV over 4 hours

Or **Human albumin** 2 ml/kg/h over 10 hours. Total daily volume 20.l/kg/day

And Colloids/Hetastarch

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

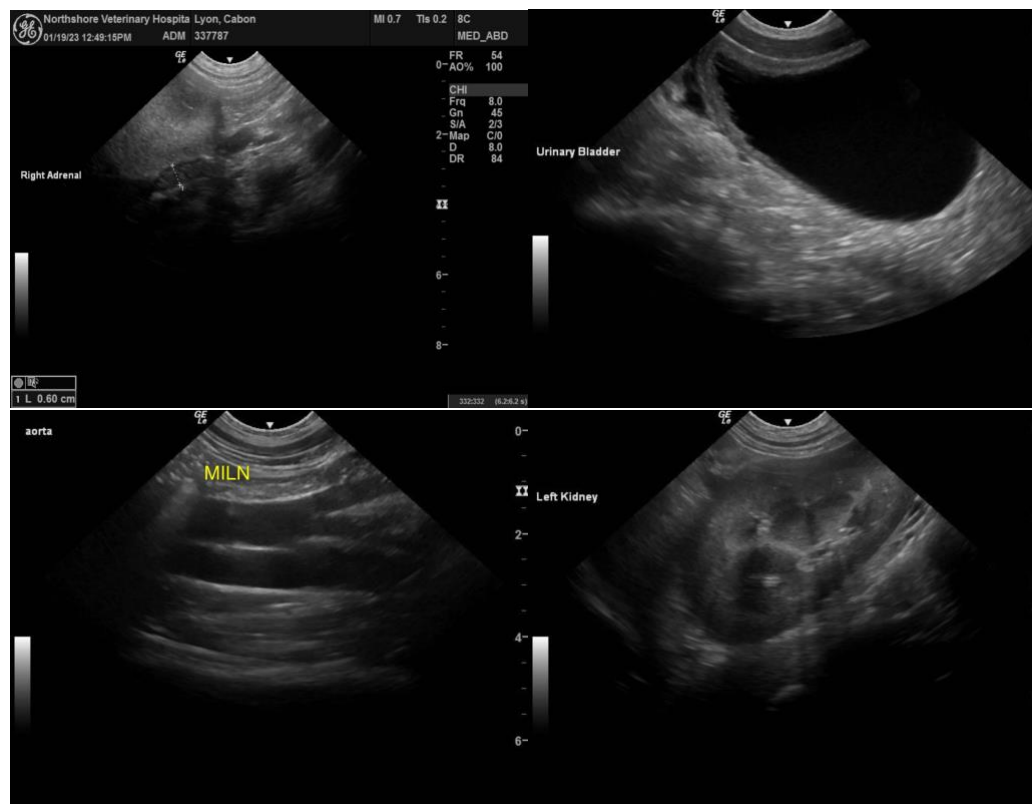
Diet: Highly digestible high-quality protein, low fiber, low fat diet (< 15% of dry matter). Hydrolyzed protein or novel protein. Purina HA or Royal Canine HP or similar.

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/m² Q 24-48 hours.

Cobalamin (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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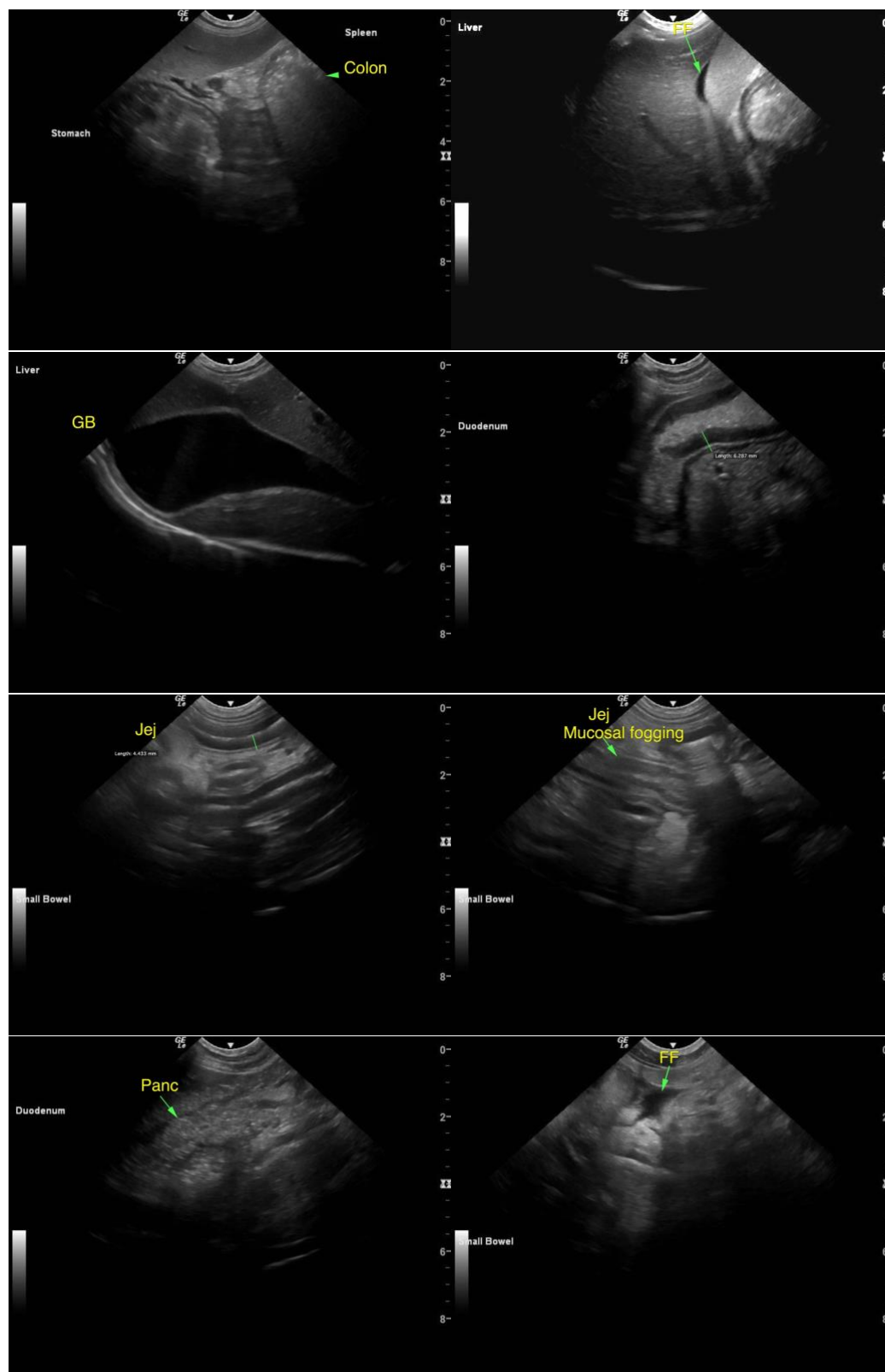
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not



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visible in the image/video clips provided.

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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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info@SonoPath.com

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