

PATIENT

Bora Kim

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

8 Years

WEIGHT

25.6 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Sharkawy

HOSPITAL NAME

Union Vet Animal
Hospital

REFERRING VET

Dr. Ray

INVOICE

16236

DATE

05/14/26

PRESENTING CLINICAL SIGNS

Chronic diarrhea for the past 2 months, Vomiting usually 2-4 hours after food. Weight loss around 12 Lb for the past 3 months. Diarrhea watery with grey color.

PT 20.7 and PTT 115.8 Cpli tested +ve Hypocalcemia, hypoalbuminemia <1, low total protein, Hypocholesterolemia, hypokalemia and hypomagnesemia. Lymphopenia and neutrophilia. low Total t4

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 change were noted.

Normal size and margination was 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 5.1 cm in length. The right kidney measured 5.2 cm in length.

Adrenal Glands

The adrenal glands were not visualized.

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 & Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non distended in size with mild nonorganized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation. No evidence of wall edema.

Gastrointestinal

The stomach presented subjective mildly thickened wall. Intact wall layering was maintained and distinct. The gastric lumen was empty with mild gas.

The small intestine revealed overall intact, prominent to mildly thickened intestinal wall owing to prominent to mildly thickened mucosa exhibiting generalized decreased mucosa echogenicity and segmental jejunal hyperechoic mucosal fogging. Segmental to generalized mild, non-obstructive small intestinal ileus to level of the colon. There was no evidence of an obstructive pattern or foreign material. The appearance of the small intestine is most consistent with protein losing enteropathy or



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lymphangiectasia. There was no evidence of infiltrative or neoplastic intestinal disease which is considered unlikely but cannot be ruled out without full thickness or endoscopic biopsies. The duodenum wall measured 0.49 cm wall width. The jejunum wall measured up to 0.55 cm wall width.

Normal visible colon wall layers were present. The colon was mildly distended containing soft to nonformed fecal matter.

Pancreas

The area of the pancreas was sonographically normal.

Free Abdomen

Intermittent mild mesenteric lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Mild perilymphatic hyperechoic omentum. Generalized mild omental hyperechogenicity and minor pockets of peritoneal effusion.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Mildly thickened empty stomach.
- Enteropathy exhibiting segmental mucosal hypoechoic/fogging and nonobstructive intestinal ileus.
- Mild generalized colon distention with soft to nonformed fecal matter in colon.
- Intermittent mild mesenteric lymphadenopathy and minor effusion.

Secondary Findings

- Normal volume liver with mild gallbladder debris (non-mucocele).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given no evidence of hepatic pathology and assuming no evidence of significant proteinuria, intestinal protein loss given hypoalbuminemia and protein losing enteropathy criteria is probable. Considerations include IBD or other inflammatory enteropathy, lymphangiectasia or infiltrative intestinal disease such as neoplasia or fungal disease.

A GI panel to include PLI/TLI/Cobalamin/Folate, fresh fecal analysis to assess for parasitic ova / Giardia and cortisol level are recommended. A definitive diagnosis would require intestinal biopsies yet contraindicated until serum protein level is greater than 2.0. Pending additional diagnostics, gastrointestinal support, including some or all of the following protocol is recommended. A guarded prognosis is indicated.

Part or all of this protocol may be considered based on your clinical impression of the patient:

OBJECTIVE: keep albumin levels > 2 g/dl, avoid thromboembolism and cavitory effusions, monitor concurrent PLN and liver disease:

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



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(Can bolus first 1/3 of dose over 15 minutes) & maintain on LRS maintenance otherwise.

High colony count probiotic Proviabile or Visbiome

Famotidine 1 mg/kg Iv Im 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

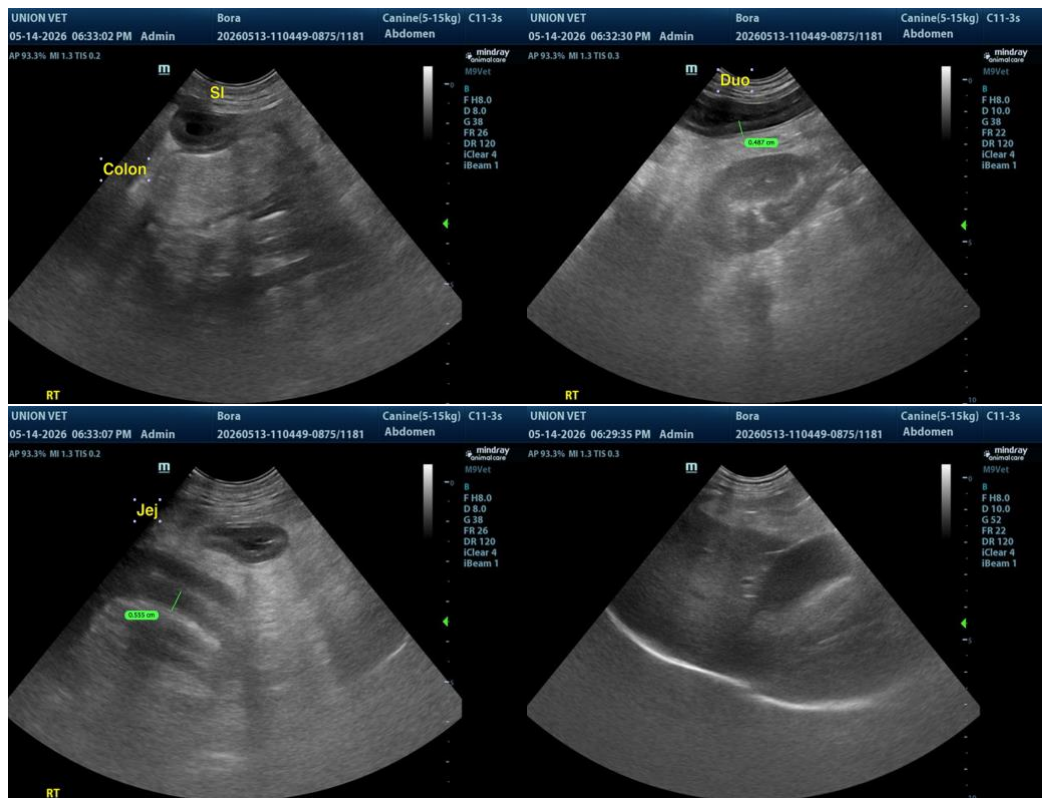
Diet: Highly digestible high quality protein, low fiber, low fat diet (< 15% of dry matter). Hydrolyzed protein or novel protein. Purina HA or Royal Canine HP or similar.

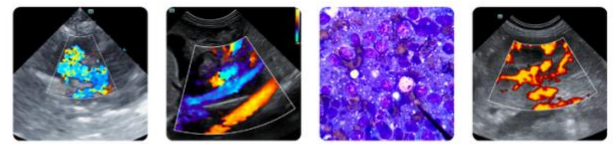
Prednisone or prednisolone 2 mg/kg bid x 3-5 days then 2 mg/kg sid. **Chlorambucil** in refractive severe IBD/alimentary lymphoma cases (monitor cbc for rare bone marrow suppression) 4 mg/m²Q 24-48 hours.

Cobalamin (B12) 250-1500 ug/dog weekly x 6 weeks.

Calcium supplementation if necessary.

Aspirin 0.5-1 mg/kg/day **or Clopidogrel (Plavix)** 1-5 mg/kg/day.





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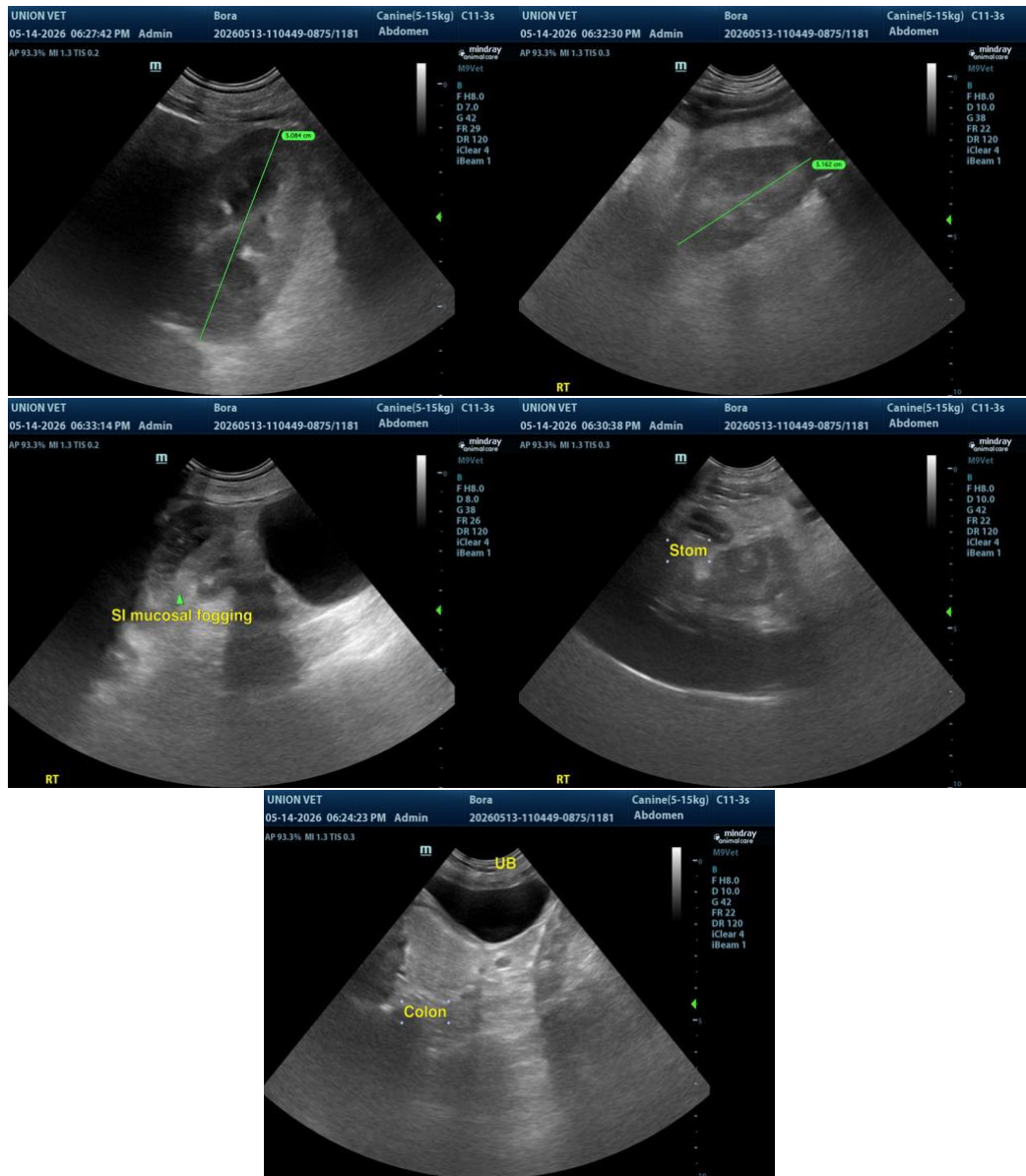
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)

info@SonoPath.com