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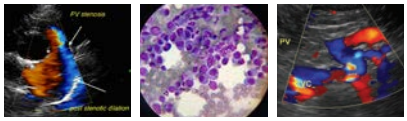
IntraPet.com



SonoPath

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DATE

8/4/22

PATIENT

Adler Brannock

SPECIES

Canine

BREED

Shepherd

SEX

Spayed Female

AGE

4/26/16

WEIGHT

85.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Honeygo AH

REFERRING VET

Dr. Mullenex

INVOICE

40175

PRESENTING CLINICAL SIGNS

Presented 7/14/22 for diarrhea and inappetance and increased pantingsome coughing Recheck on 8/2 pets diarrhea improved slightly on meds but back and watery X 5 days. Pet has vomited bile 3-4 times in the past 5 days. Owner reports resting respiration is 60. we have seen pet infrequently over past 3 years but owner has reported coughing, panting. Pet was at ER 2021 for trouble breathing. No evidence of cardio or pulm disease.

Current Medications: Amoxicillin 500mg 1 BID 7 days, Metronidazole 500mg 1BID 7 days repeated 8/2/22, Trazadone 100mg 1 tablet prior to exams, Acepromazine 25mg 1 tablet prior to exams
Lab Results: 7/14/22 WBC 23.28, Albumin 1.7, CA 8, total Protein 3.3, globulins 1.6. 8/2/22 bloodwork similar except WBC normal,
Radiographs: 7/14/22- lateral, interstitial pattern, abdomen WNL. 8/2/22: 1 lateral xray - fluid in the abdomen.
Date of Previous IntraPet Ultrasound: No previous.

Sedation: Telazol 100mg/ml 0.4cc plus Torbutrol 10mg/ml 0.4cc, IV

Stat Report: Not requested.

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 (7.46 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 (7.55 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 0.60 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. The spleen echotexture is heterogenous and mildly mottled, 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 uniform diameter with minimal fluid distension. Wall thickness is moderately increased. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering. Jejunum wall measured 0.31 cm. There is mucosal fogging and speckling visualized. 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 nonformed fecal material/liquid 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
There is a small amount of free fluid. No lymphadenopathy. The omentum appears generally mildly hyperechoic.

ULTRASONOGRAPHIC FINDINGS

- Mildly mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- Thickened small intestine with mucosal fogging and speckling – Bright mucosal speckling has been proposed to represent dilated lacteals or focal accumulation of mucus, cellular debris etc.. in the mucosal crypts 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).

- Fluid dilated colon – consistent with the diarrhea reported.

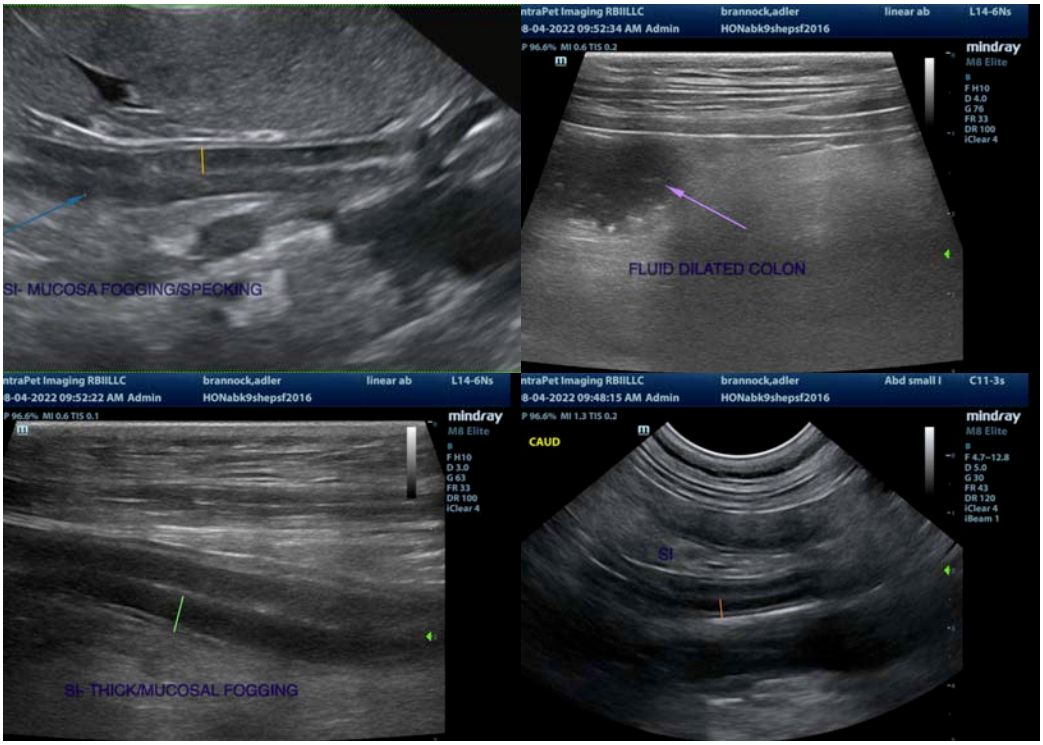
- Small free abdominal fluid – likely secondary to the hypoalbuminemia.

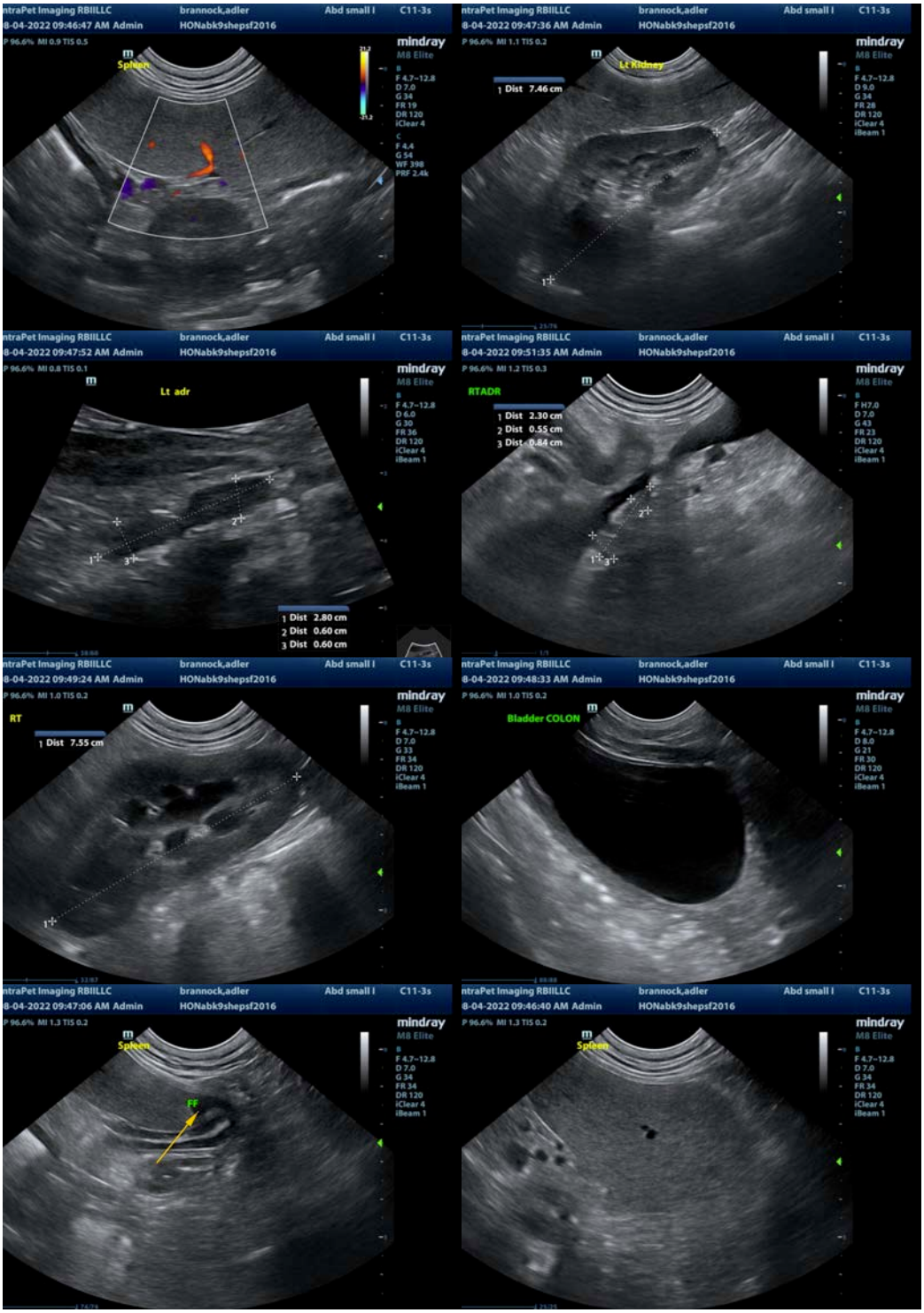
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The small bowel appears generally thickened and there are some areas with mucosal fogging, edema and mucosal speckling evident. These findings are most consistent with a protein losing enteropathy, but I still recommend a liver function test and evaluation of a urinalysis +/- urine protein to creatinine ratio for excess protein, as concurrent renal losses and liver disease can be present.

The most common causes for a protein losing enteropathy include lymphangiectasia, IBD, and neoplasia (other differentials exist). An endoscopic GI biopsy is necessary to differentiate between these processes, and this is strongly recommended, as it will greatly affect prognosis and treatment plan. In the meantime, consider:

- Recommend an ultra low-fat diet.
- Recommend chronic probiotic therapy and symptomatic treatment for diarrhea.
- Recommend a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to further evaluate for concurrent GI issues.
- Recommend 3-view thoracic radiographs (already done).

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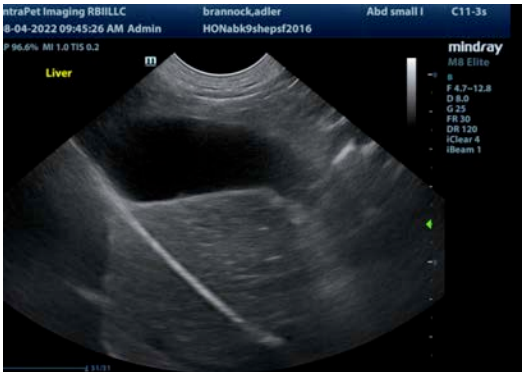

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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