

**DATE PRESENTING CLINICAL SIGNS**

3/8/22 Chronic hx (approx 3-4 mo duration) of diarrhea, unresponsive to Metronidazole and Provable Forte. Unable to get pt to eat intestinal diets.

PATIENT

Phinn Battaglia

Current Medications: Started B12 injection on 3/2/22, Metronidazole 15mg/kg for 3 months, Provable Forte for 6 weeks.

SPECIES

Canine

Lab Results: Fecal OP/Giardia negative on 3/2/22. 12/20/21- EOS 1932, Albumin 2.6, mild proteinuria. 4dx negative. Fecal OP and Hookworm/roundworm/whipworm antigen negative.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Cattle Dog X

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Neutered Male

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.

AGE

3/27/08

The prostate is normal in size (1.0 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

WEIGHT

31.5 Pounds

The left kidney has a normal shape and size (5.01 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.

INTERPRETED BY

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

The right kidney has a normal shape and size (5.06 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.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

Adrenal Glands

The left adrenal gland is normal in size measuring 0.53 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.

HOSPITAL NAME

Churchville Vet Clinic

The right adrenal gland is normal in size measuring 0.53 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.

REFERRING VET

Dr. Hoerle

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.

INVOICE

35980

Liver

The liver is subjectively normal in size, and hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. 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 moderate fluid distension. Wall thickness appears moderate to severely thickened. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measured 0.57 cm. Jejunum wall measured 0.44 cm. There is no mucosal speckling. 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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a significant mesenteric lymphadenopathy at the root of the mesentery with mesenteric lymph node visualized measuring 0.85 cm x 4.41 cm, 1.0 cm, and 0.67 cm. The omentum is of increased echogenicity around the large lymph nodes.

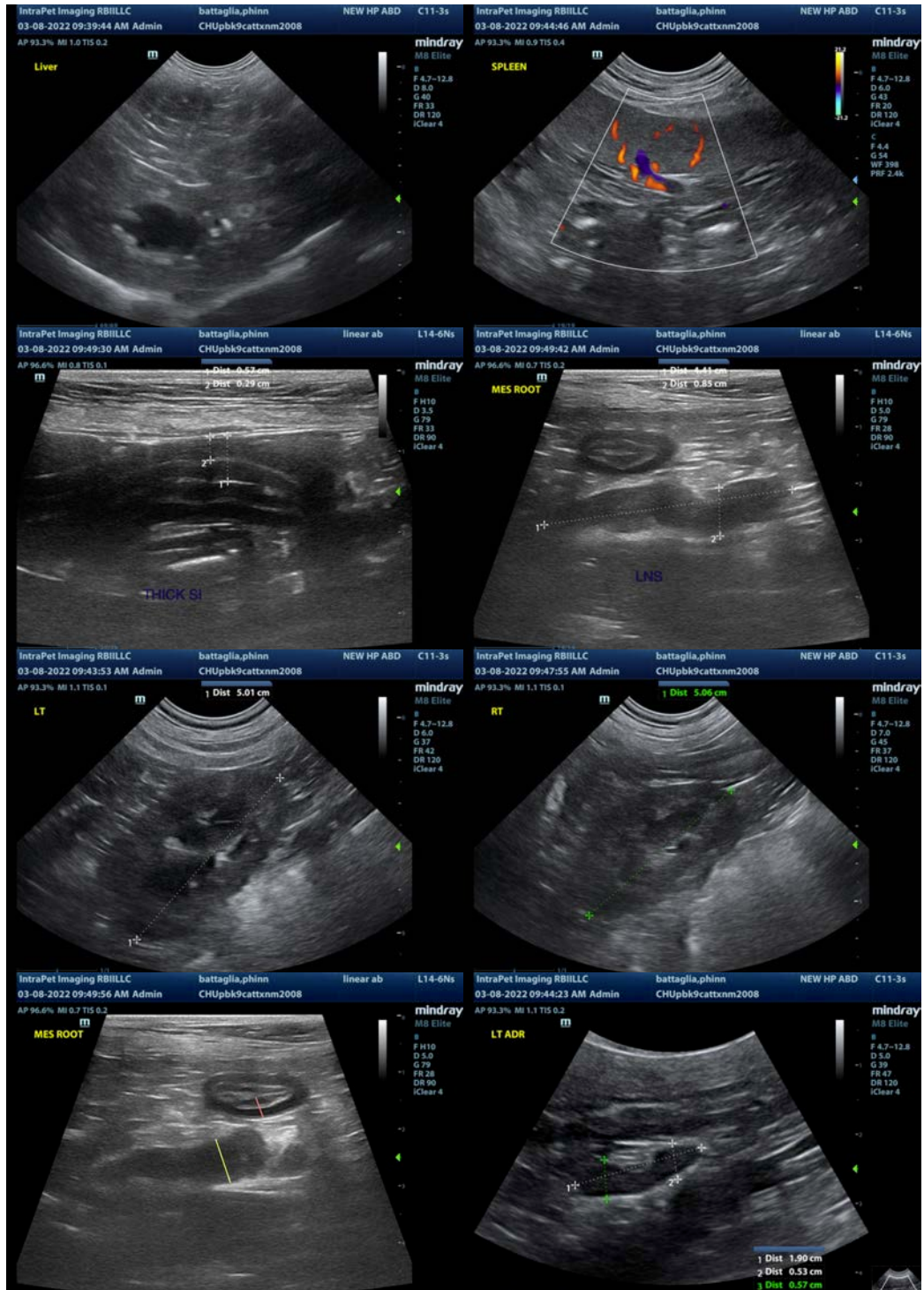
ULTRASONOGRAPHIC FINDINGS

- Hypoechoic, heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Moderately thickened small intestine – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.
- Moderate mesenteric lymph node enlargement – The moderate mesenteric lymphadenopathy could be concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is diffuse significant bowel wall thickening with enlarged mesenteric lymph nodes. This is concerning for an inflammatory or possibly neoplastic process. Consider a fine needle aspirate of a mesenteric lymph node and a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to further evaluate B12 levels, etc. If this patient will not eat a commercial GI diet, consider consultation with a veterinary nutritionist who can formulate a hypoallergenic homemade diet. Recommend chronic probiotic therapy. Lastly, consider GI biopsies if lymph node aspirates are not diagnostic.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.



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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