IMAGING PERFORMED BY

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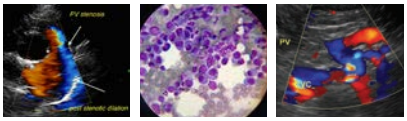

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

8/23/23

PATIENT

Liberty Thurnes

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

7/16/14

WEIGHT

51.6 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Mt. Airy Vet Associates

REFERRING VET

Dr. Cormier

INVOICE

44864

PRESENTING CLINICAL SIGNS

Liberty presented for lethargy, hyporexia, and diarrhea (dark to black stool). She was treated with supportive care (SQF, Cerenia, metronidazole) with no improvement. She returned and received similar treatment, but with tylan instead of metronidazole. There were no parasites noted in her stool sample.

Current Medications: Ondansetron 8mg BID PRN for nausea and appetite, Tylan powder - 1.4 tsp BID
Lab Results: SDMA and AST mildly elevated, ALB mildly decreased. Low T4, though suspect euthyroid sick). No parasites in fecal.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Requested/ Approved.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall is largely of normal thickness but there are some mild mucosal projections visualized consistent with small polyps. Examples measure 0.61 cm x 0.31 cm and 0.34 cm x 0.31 cm. Inflammatory polyps are suspected, but an early neoplastic process cannot be definitively ruled out.

The left kidney has a normal shape and size (6.98 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 (7.16 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 0.63 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, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a hypoechoic nodule visualized within the parenchyma in the mid body of the spleen measuring 1.14 cm x 0.61 cm.

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 gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach contains a large amount of fluid/ingesta. 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 increased. Duodenum wall measures 0.60 cm. Jejunum wall measures 0.52 cm. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering. Visualized peristalsis appears appropriate. Overall, there are large areas of small intestine that appear irregular and thickened with prominent irregular mucosal layer and fuzzy/indistinct wall layering. There is a focal area of bowel that appears particularly thickened with a wall thickness of 0.97 cm and significantly reduced wall layering. Some of the more affected areas are measured at 0.69 cm and 0.64 cm in thickness.

The large intestine appears to have a moderate amount of non-formed fecal material/fluid and gas. More distally, the colon wall appears irregular and thickened asymmetrically with an area of focal thickening measuring 0.60 cm.

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 scant free fluid noted. There are numerous hypoechoic, rounded, large mesenteric lymph nodes. Examples measure 1.58, 1.2, and 1.87 cm x 1.59 cm. The omentum is diffusely hyperechoic.

Other
The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

PRIMARY FINDINGS

- Small polypoid projections visualized associated with the urinary bladder – Findings are most consistent with inflammatory polyps, although an early neoplastic process cannot be ruled out. Recommend a urinalysis and culture.

- Hypoechoic nodule visualized in the spleen – There is a non-cavitated, hypoechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Large fluid dilation of the gastric lumen – Correlate with feeding history. If the patient was adequately fasted, consider such differentials as delayed gastric emptying or a partial outflow tract obstruction (none clearly visualized).

- Thickened, irregular small intestine with reduced detail of wall layering – Findings are concerning for possible infiltrative disease (round cell neoplasia, carcinoma, other), severe enteritis, etc.

- Asymmetrical thickening of the colon wall – Findings could be consistent with severe colitis (inflammatory, infectious, etc.) or infiltrative disease (neoplasia, granulomatous, etc.).

- Moderate mesenteric lymphadenopathy – 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.

SECONDARY FINDINGS

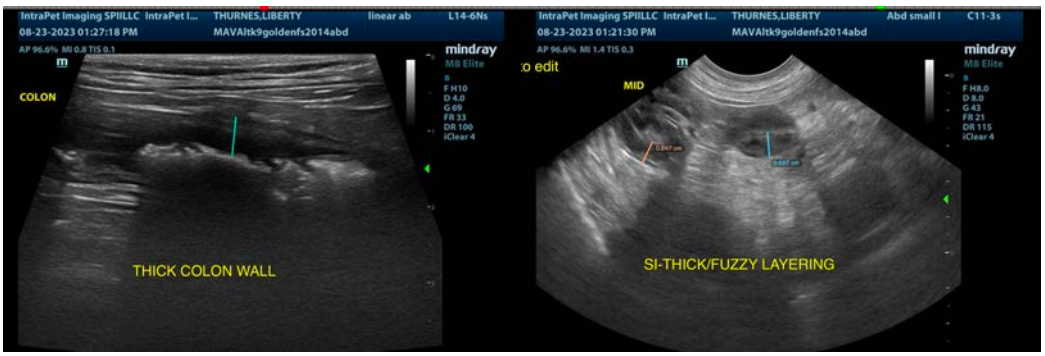
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

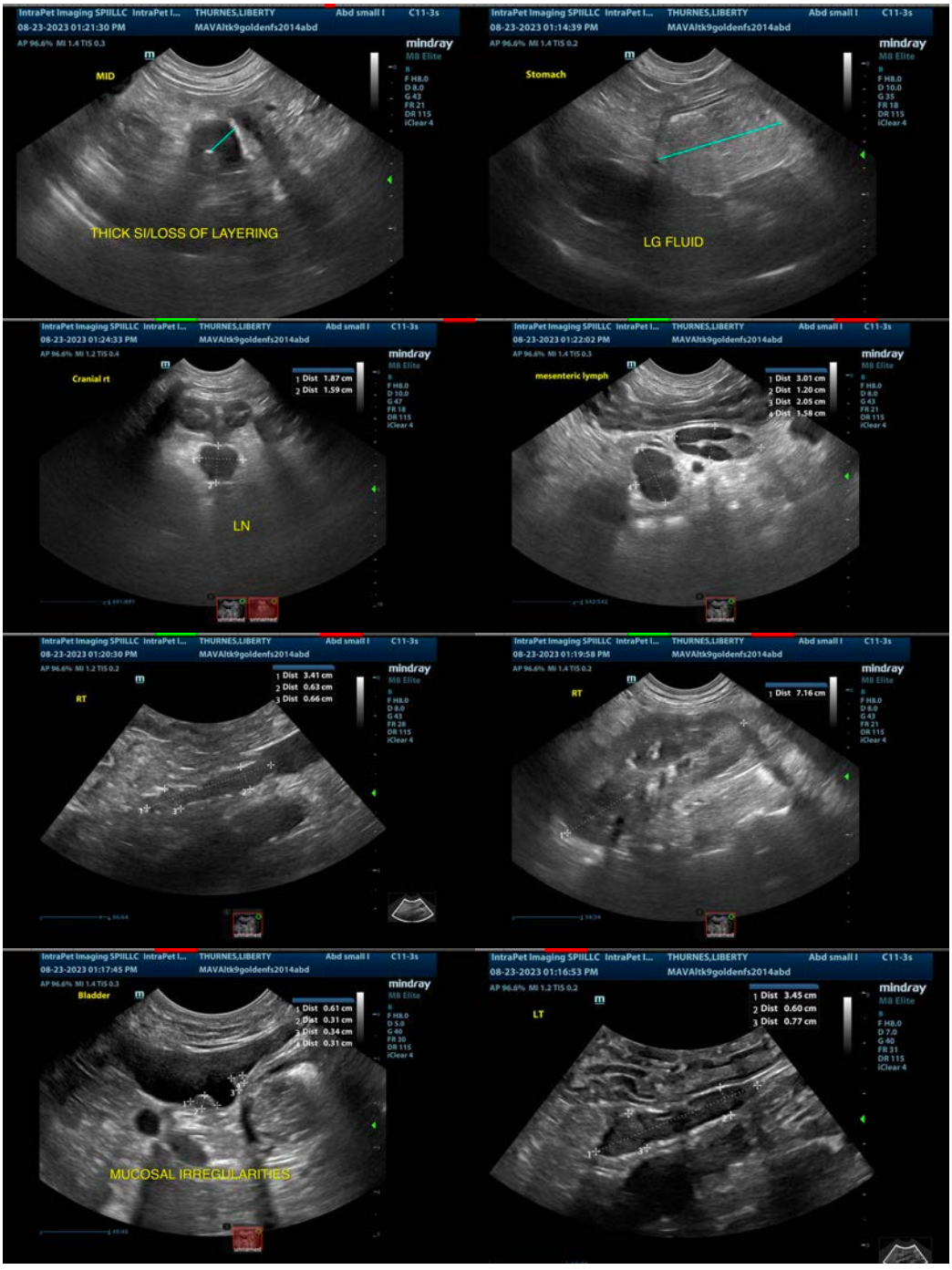
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is diffuse thickening of the small intestine with several areas that have significantly reduced detail of wall layering and irregular wall. One focal area appears to have significantly reduced layering, almost creating a mass effect. Additionally, the colon wall is irregular and thickened and there are numerous large, hypoechoic mesenteric lymph nodes. Recommend a fine needle aspirate of a mesenteric lymph node. if a diagnosis cannot be obtained based on this evaluation, you could consider aspirating the colon wall or a bowel loop that appears severely affected. If a cytologic diagnosis cannot be obtained, surgical biopsies may be necessary.

Recommend a urinalysis and culture to further evaluate the irregularities associated with the urinary bladder wall. If an infection is present, recommend reevaluation of the urinary bladder wall with ultrasound after treatment. If no infection is present, traumatic catheterization or cystoscopy could be considered.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

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MID
THICK SI/LOSS OF LAYERING
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Stomach
LG FLUID
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mindray
Cranial rt
1 Dist 1.87 cm
2 Dist 1.59 cm
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mindray
mesenteric lymph
1 Dist 3.01 cm
2 Dist 1.20 cm
3 Dist 2.05 cm
4 Dist 1.58 cm
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08-23-2023 01:20:30 PM MAVAltk9goldenfs2014abd
mindray
RT
1 Dist 3.41 cm
2 Dist 0.63 cm
3 Dist 0.66 cm
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mindray
RT
1 Dist 7.16 cm
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Bladder
1 Dist 0.61 cm
2 Dist 0.31 cm
3 Dist 0.34 cm
4 Dist 0.31 cm
MUCOSAL IRREGULARITIES
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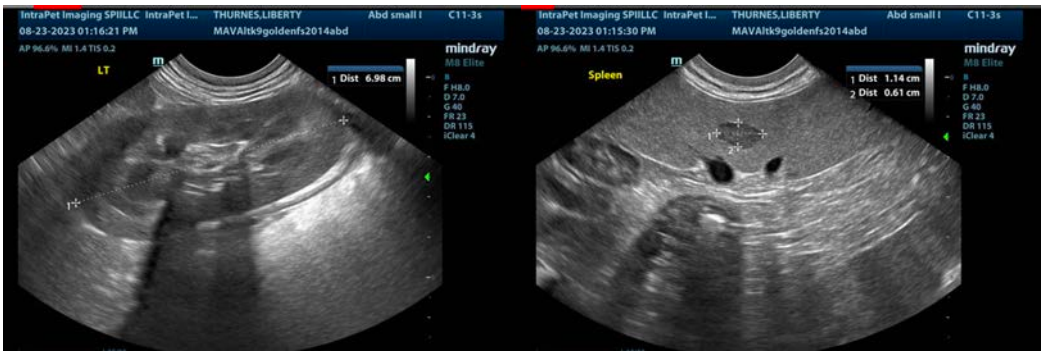
08-23-2023 01:16:53 PM MAVAltk9goldenfs2014abd
mindray
LT
1 Dist 3.45 cm
2 Dist 0.60 cm
3 Dist 0.77 cm



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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