**DATE PRESENTING CLINICAL SIGNS**

8/25/22

Beginning Sunday started vomiting - continued until Monday night - approx. 30x. Seen rDVM Tuesday - fluids given & BW performed. Per owner some of blood levels were off but uncertain which. Went home and did eat after going home. Today vomited up what she ate. Lethargic and dazed. Current diet - lams also gets bones as treats - Puperoni, Milk bones and peanut butter filled bones. Did have bone before episode started.

PATIENT

Maya Hacker

SPECIES

Canine

Current Medications: Ampicillin, Buprenorphine, Cerenia, Protonix.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: STAT requested.

BREED

Labrador X

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

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

5/16/11

The left kidney has a normal shape and size (7.05 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.

WEIGHT

58.3 Pounds

The right kidney has a normal shape and size (7.24 cm) with a small non-obstructive nephrolith measuring 0.52 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, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.99 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.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

The right adrenal gland is normal in size measuring 0.92 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.

HOSPITAL NAME

Animal Emergency
Hospital

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.

REFERRING VET

Dr. Saubier

Liver

The liver is subjectively normal in size, and echogenicity 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.

INVOICE

40732

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 is dilated with a large amount of fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

Some of the visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal to moderate fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path. However, there is a focal section of small intestine that appears to be in the caudal abdomen, exhibiting plication or corrugation, which has focal reactive mesentery and what I am concerned could be a linear foreign body. The bowel wall in these areas appears thickened and has reduced detail of wall layering, likely consistent with severe enteritis. No evidence of a mass lesion visualized.

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 prominent and mottled compared to the surrounding isoechoic 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. No lymphadenopathy. The omentum is focally hyperechoic around the abnormal bowel loop.

ULTRASONOGRAPHIC FINDINGS

- Focal bowel corrugation/plication with thickened, irritated bowel – Consider possible linear foreign body.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- 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.
- Large fluid dilated stomach – Correlate with feeding history. If the patient was adequately fasted, then consider such differentials as delayed gastric emptying or pyloric outflow tract obstruction (none clearly seen).
- Scant free abdominal fluid and reactive mesentery.

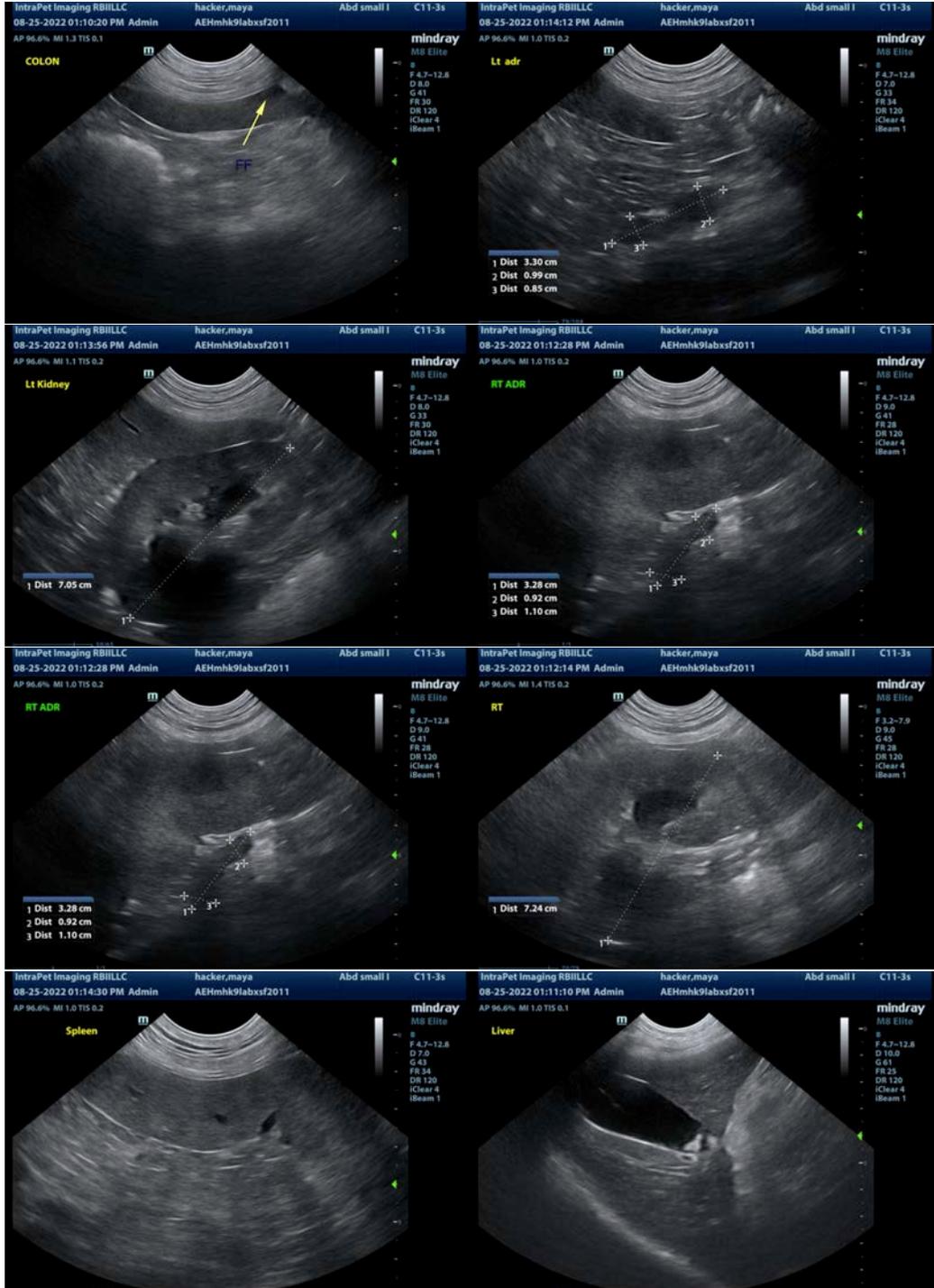
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a section of bowel in the caudal abdomen that appears to take some hairpin turns, consistent with plication in some views. There is the hint of a possible string foreign body, but this is not definitive. Additionally, there is focal reactive mesentery in the area. Findings are concerning for either focal severe enteritis or a linear foreign body. Additionally, the stomach is moderately distended with fluid and ingesta. Correlate with history and abdominal radiographs, as this could represent secondary ileus, a recent meal, or ingested foreign material.

No focal lesions are visualized associated with the liver, but is mildly heterogeneous, and both adrenal glands are borderline enlarged. This may be something to consider in the future and reevaluate when the patient is not ill/stressed.

Based on the duration of symptoms and the appearance of the abnormal bowel, I would consider exploratory to evaluate for a possible linear foreign body. Recommend obtaining GI biopsies at the time of surgery regardless of if a foreign body is observed or not. Correlate these findings with your clinical assessment and abdominal radiographs.





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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