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DATE PRESENTING CLINICAL SIGNS

8/2/22 Patient presents for evaluation of anorexia, vomiting, and diarrhea.

PATIENT Current Medications: None current.

Wiley Ruter Lab Results: Pending.

Radiographs: Hazy GI/abdominal pattern noted
Date of Previous IntraPet Ultrasound: No previous.

SPECIES Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Mixed 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.

SEX

Neutered Male 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.

AGE

12/14/12 The left kidney has a normal shape and size (4.51 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

15 Pounds The right kidney has a normal shape and size (5.4 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)

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Miller

INVOICE

40056

Adrenal Glands

The left adrenal gland is normal in size measuring 0.59 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 0.76 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. No focal parenchymal abnormalities are visualized.

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.

The gallbladder is prominent and distended with a large amount of mixed echogenic intraluminal material with some small mineralizations. The gallbladder appears somewhat collapsed with a ring of echogenic fluid surrounding it in addition to hyperechoic mesentery. Findings are concerning for a ruptured gallbladder

mucocele with surrounding bile peritonitis. The duodenal papilla is visualized, and the common bile duct adjacent to this area appears somewhat dilated at 0.5 cm.

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 minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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 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

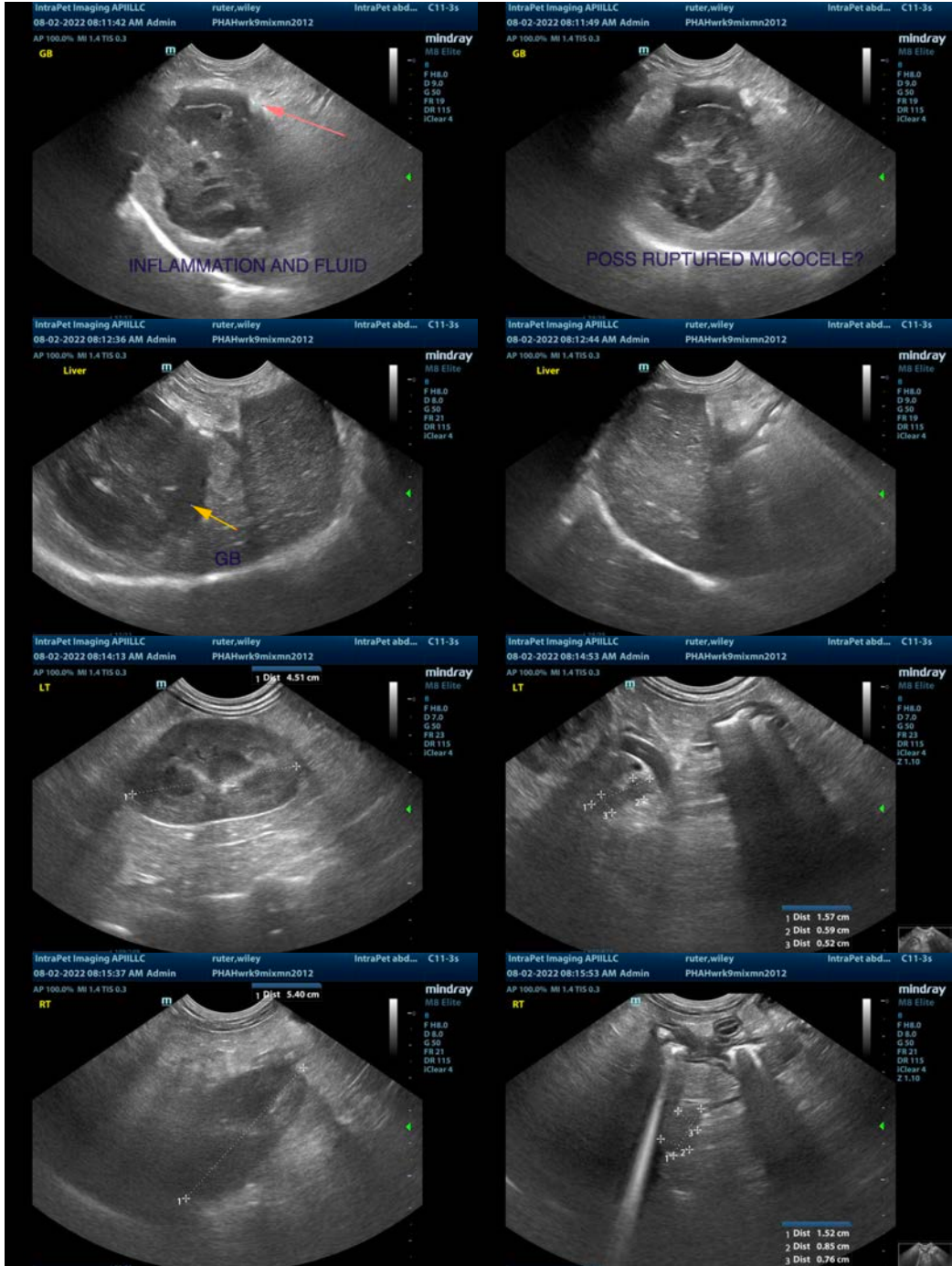
There is a moderate amount of echogenic free fluid present in the abdomen. There is no evidence of a lymphadenopathy, but there is severe diffusely hyperechoic mesentery, most consistent with diffuse peritonitis (sterile or infectious).

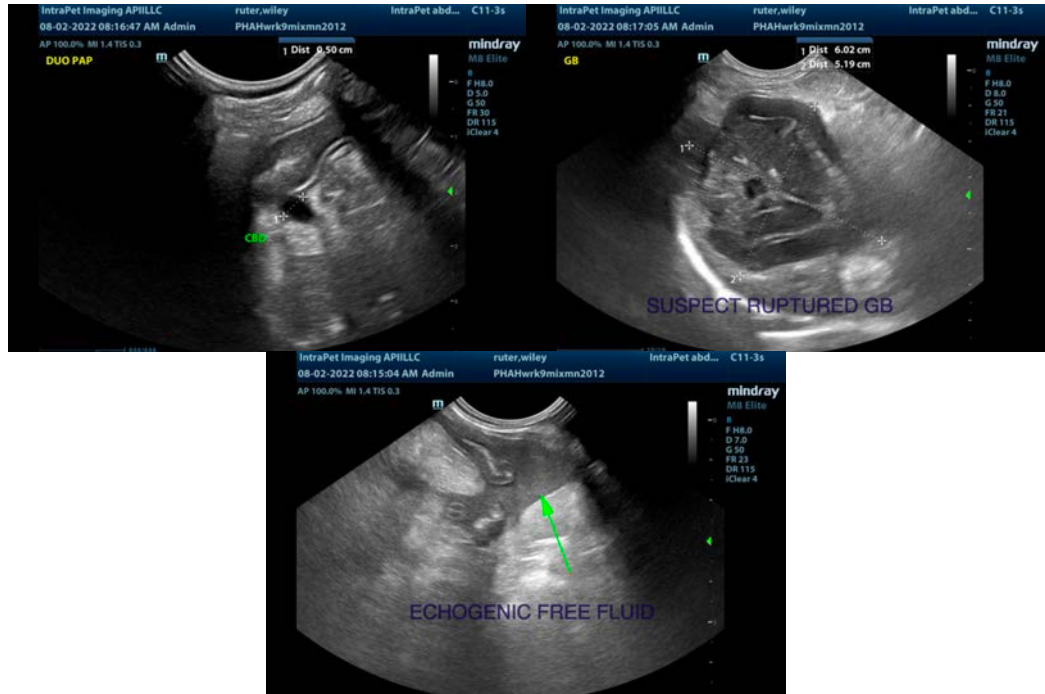
ULTRASONOGRAPHIC FINDINGS

- Abnormal prominent gallbladder surrounded by echogenic free abdominal fluid – concerning for a possible ruptured gallbladder mucocele.
- Diffusely hyperechoic mesentery with a moderate amount of echogenic free abdominal fluid – most consistent with diffuse peritonitis. Primary differential would be a bile peritonitis +/- bacterial peritonitis. Recommend fluid analysis, cytology and culture.
- 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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gallbladder appears prominent and distended, yet somewhat deflated, with surrounding echogenic fluid. This echogenic fluid is also present in the mid to caudal abdomen along with diffuse inflammation. Findings are concerning for a ruptured gallbladder mucocele and diffuse peritonitis. Recommend sampling of the abdominal fluid for fluid analysis, cytology and culture. if this fits with the clinical picture, and initial in-hospital evaluation of the fluid, then consider emergency surgery.





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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