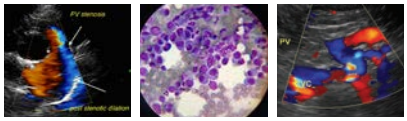
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

6/21/22

PATIENT

Dixie Whitelaw-Klein

SPECIES

Canine

BREED

Border Collie

SEX

Spayed Female

AGE

4/17/13

WEIGHT

47.9 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Saubier

INVOICE

38945

PRESENTING CLINICAL SIGNS

Seen last week - bloody urine, weakness in backend and vomiting Following diagnostics performed: UA - WBC. Urine culture no growth. ACTH Stim - wnl Abdominal US Responded to treatment and went home Saturday evening vomited. Now lethargic - not eating. Plan to readmit into hospital - recheck US. Diarrhea.

Current Medications: None listed.
Date of Previous IntraPet Ultrasound: 6/13/22. See attached.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (5.02 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (5.99 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The left adrenal gland is enlarged in size, measuring 2.64 cm long x 0.82 cm at the cranial pole and 0.83 cm at the caudal pole. Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The right adrenal gland is enlarged in size, measuring 2.57 cm long x 0.96 cm at the cranial pole and 0.79 cm at the caudal pole. Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

The liver is subjectively enlarged with irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. A focal hyperechoic nodule is noted in the mid liver, measuring 2.0 cm in diameter. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall is diffusely thick, measuring between 0.8-1.0 cm with early fogging/loss of layering noted. The stomach is markedly fluid distended.

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The bowel is diffusely mildly fluid distended without evidence of an obstructive pattern, plication and/or visible foreign material. Small intestinal hyperperistalsis is noted.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

PRIMARY FINDINGS

- Diffusely thick gastric wall – consistent with infiltrative disease. Benign inflammatory bowel disease as well as infiltrative neoplasia are differentials.

- Inflammatory bowel disease (IBD) pattern with diffuse mild fluid distention, consistent with secondary gastroenteritis - This finding has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No concurrent lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probably, but lymphoma cannot be definitively ruled out without tissue sampling.

SECONDARY FINDINGS

- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.

- Liver Nodular Hyperplasia– These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

- Focal hyperechoic liver nodule – Differentials include nodular hyperplasia, fibrosis, granuloma, etc. An infiltrative neoplastic or metastatic lesion cannot be ruled out, but is considered less likely.

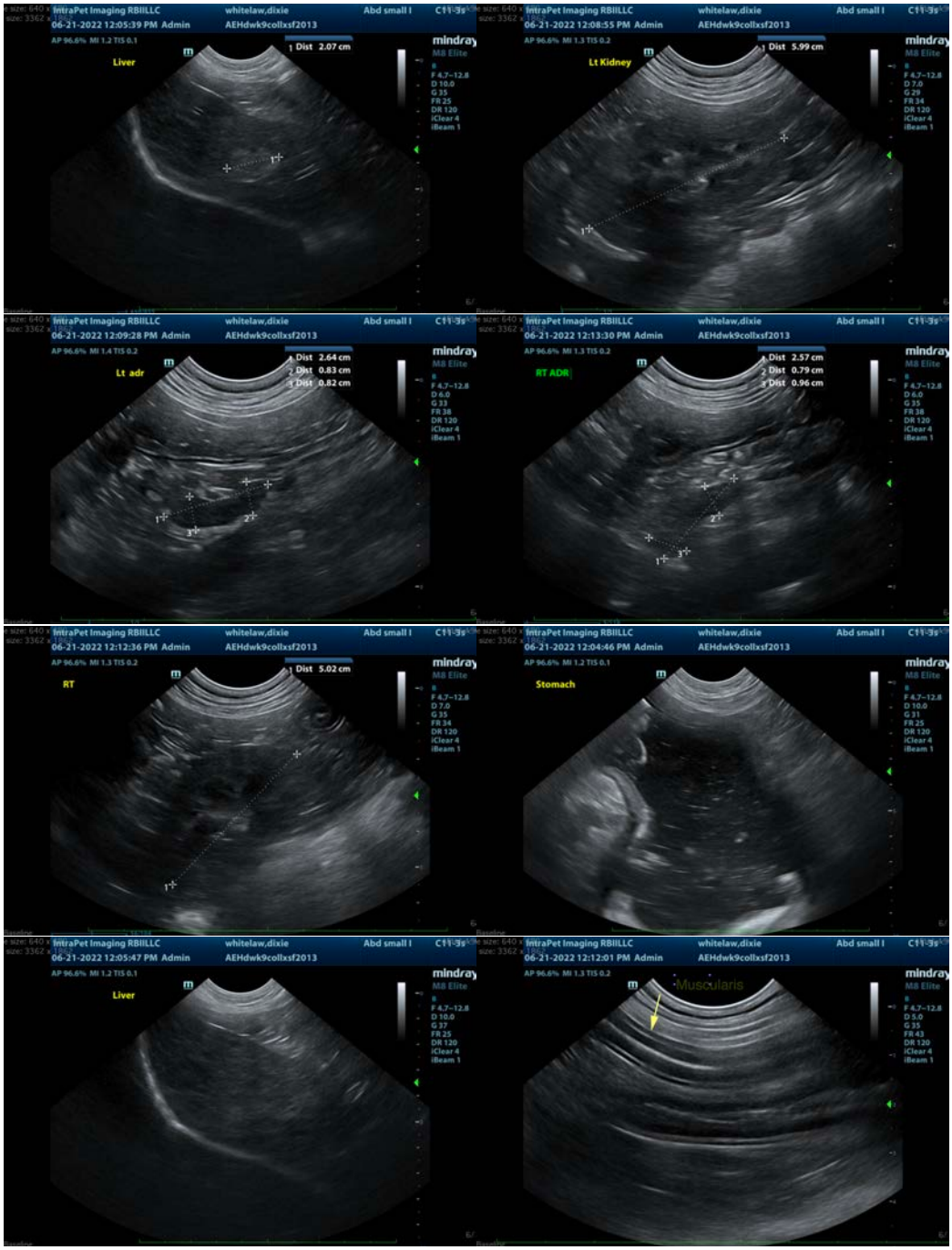
- Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

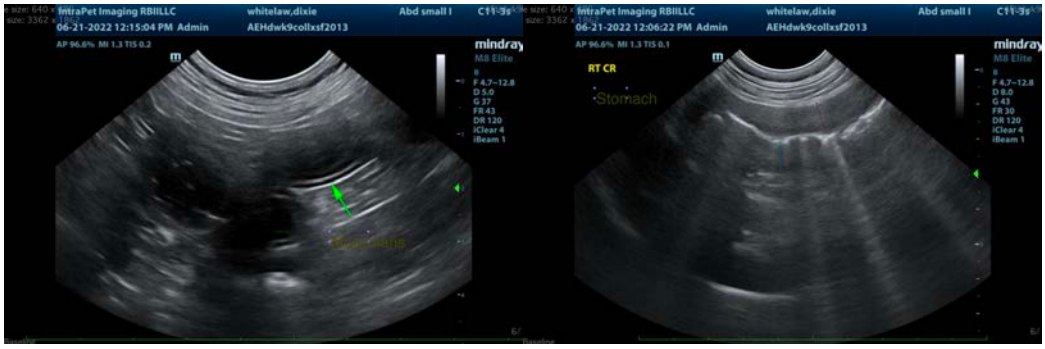
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

- Biopsies of the stomach and small bowel are recommended, either surgical biopsies or the reportedly planned gastroscopy and endoscopic biopsies.

- In the meantime, if not already evaluated, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.





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.

Beth Johnson, DVM, DACVIM
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