IMAGING PERFORMED BY

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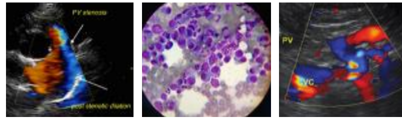

SonoPath
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DATE
1/31/23

PATIENT
Kenny Weisberg

SPECIES
Canine

BREED
Pit Bull Mix

SEX
Neutered Male

AGE
2/14/2007

WEIGHT
58.6 Pounds

INTERPRETED BY
Beth Johnson, DVM
DACVIM

HOSPITAL NAME
Timonium AH

REFERRING VET
Dr. McIntyre

INVOICE
20892

PRESENTING CLINICAL SIGNS

History: Chronic GI upset. Recent flare up of diarrhea. Typically, responsive to Metronidazole.

Current Medications: Metronidazole 500mg BID, Cerenia 80mg SID.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System
Urinary bladder is adequately 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 area of the prostate is examined without evident prostatic pathology.

Left kidney is normal is size (6.39 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 or infarcts observed. Multiple small nonobstructive nephroliths are noted.

Right kidney is normal is size (6.35 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 or infarcts observed. Multiple small nonobstructive nephroliths are noted.

Adrenal Glands
Left adrenal gland is normal in size (2.66 cm long x 0.87 cm at cranial pole and 0.84 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal. A hyperechoic nodule is noted in the X pole. Nodule does not disrupt normal shape and/or architecture.

Right adrenal gland is normal in size (3.14 cm long x 2.54 cm at cranial pole and 0.6 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal. A hyperechoic adrenal nodule is also noted in the cranial pole of the right adrenal gland. The nodule is resulting in swollen capsular expansion without evidence of capsular escape or vascular invasion.

Spleen
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
Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion. The right liver is especially rounded and an emerging isoechoic mass can't be definitively ruled out.

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 visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine is diffusely, mildly thick or near the upper end of normal thickness for a patient this size, with areas of mildly thick muscularis layer, relative to the mucosa. No loss of layering is appreciated. The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas
The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. 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.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral adrenomegaly with bilateral hyperechoic adrenal nodules in the cranial poles of both adrenal glands- This is likely secondary to adrenal hyperplasia, secondary to pituitary dependent hyperadrenocorticism vs stress or normal patient variant. Given the swollen appearance of the right adrenal gland, however, a right adrenal adenoma is also possible. Additionally, while considered less likely, an emerging adenocarcinoma or pheochromocytoma can't be definitively ruled out.

- Mild inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.

- Heterogenous Liver – 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. An emerging isoechoic liver mass cannot be definitively ruled out.

Secondary Findings

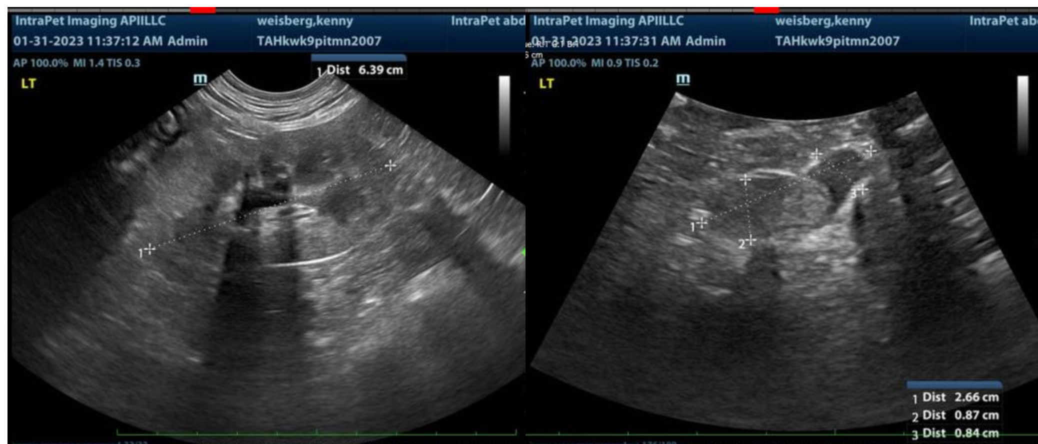
- Small nonobstructive nephrolithiasis is noted bilaterally.

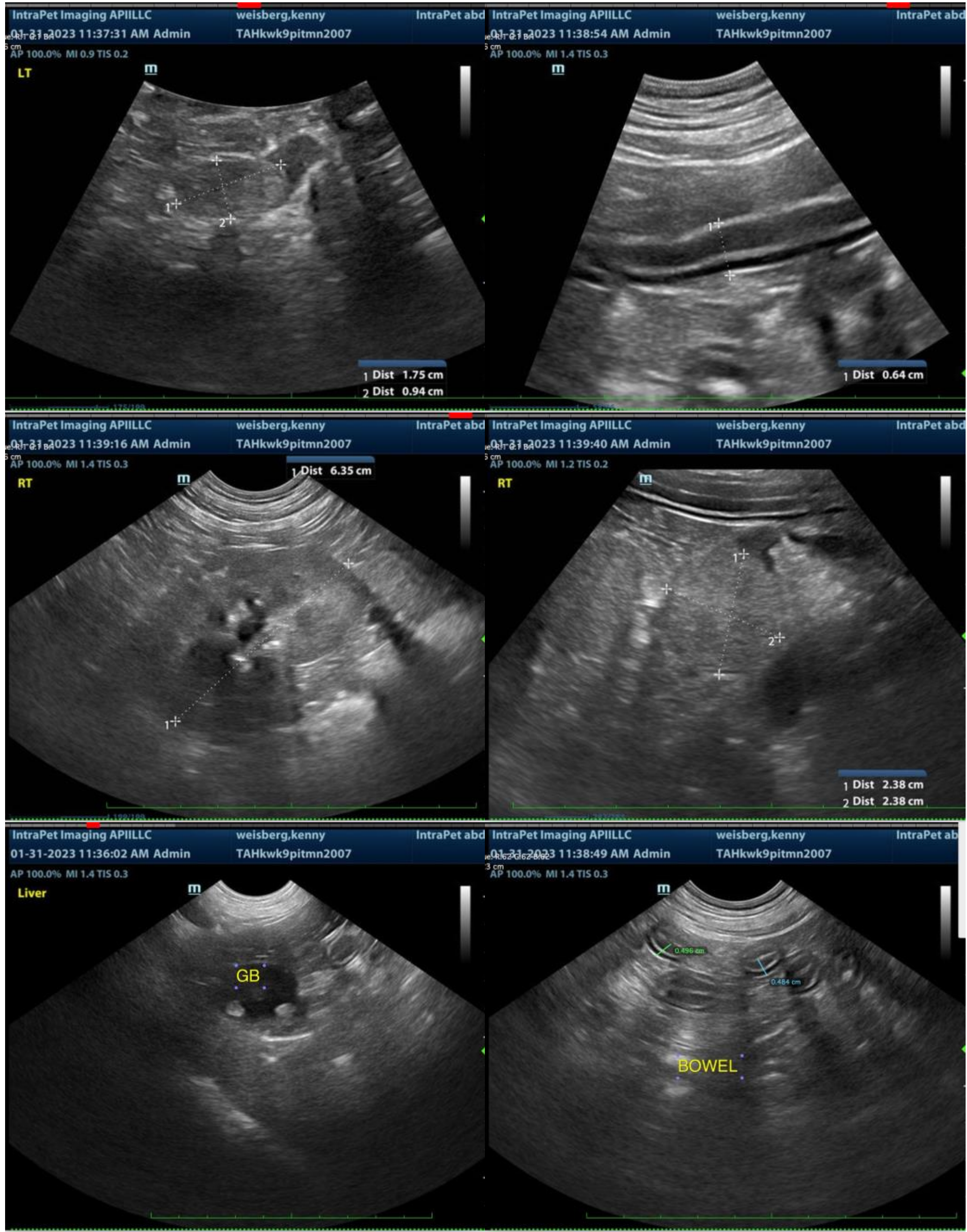
- Mild gallbladder debris **-** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted 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

Given this patients reported chronic intermittent diarrhea and bowel changes noted above, 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.
Ultimately, biopsies of the gastrointestinal tract may be necessary to definitively diagnose, and therefore manage this patients chronic diarrhea. However, in the meantime, given the response to antibiotics, additionally, a fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease, followed by empirical therapeutic recommendations of deworming with a 5-day course of Panacur, a probiotic, such as Visbiome or Proviable, and potentially a transition in diet, if tolerated, based on trial-and-error response, beginning with a hydrolyzed protein diet.

Additionally, a majority of the changes described above, could be explained by underlying hyperadrenocorticism. Therefore, if clinical signs of hyperadrenocorticism are present, further testing could be considered, beginning with a low dose Dexamethasone suppression test. However, further evaluation is not warranted without supporting clinical signs, and managing this patients gastrointestinal disease is considered the priority.




IntraPet Imaging APIILLC
weisberg,kenny
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Liver
GB
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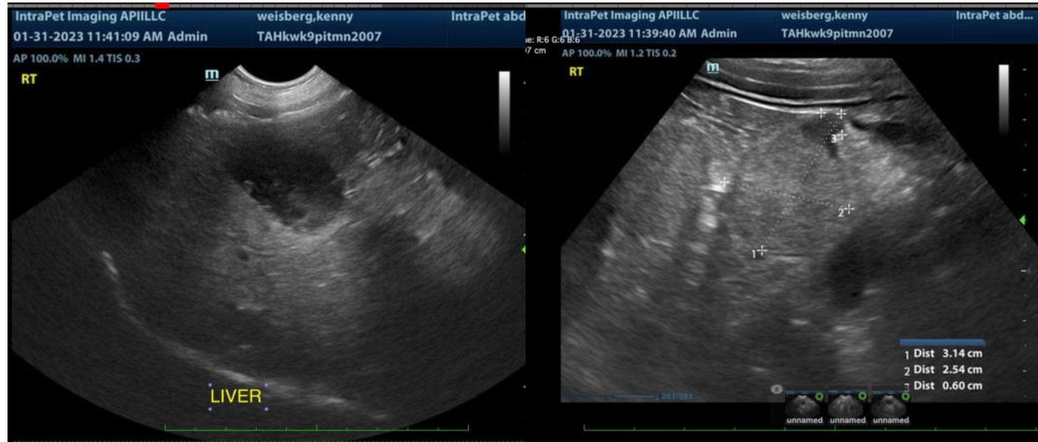
BOWEL



The information and recommendations provided are based on the images presented by the referring veterinarian. 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
Beth.Johnson@SonoPath.com