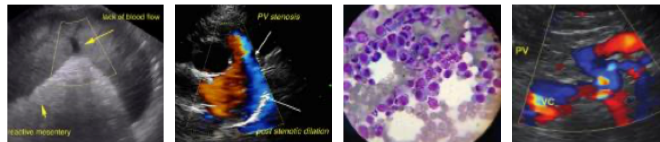
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com™
1-800-838-4268 info@sonopath.com

PATIENT
Buddy Fernandez

SPECIES
Canine

BREED
Cocker Spaniel Mix

SEX
Neutered Male

AGE
9 years

WEIGHT
45.1 lbs

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
Cresskill AH

REFERRING VET
Dr. Yablanovich

INVOICE
12092

DATE
1.25.23

PRESENTING CLINICAL SIGNS

History: Patient presents for hematochezia, hyporexia, and 1-week history of vomiting (no vomiting after treatment with Cerenia). No current meds. Audible gurgling stomach sounds.

Abnormal PE/Chem/CBC/UA Results: CBC: PLT 566k. 4DX (-). Chem: ALP 1,947, ALT 103, K 5.5, Phos. 6.6, chol. 492. U/A: 3+ protein, USG 1.023.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System
The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (1.09 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (6.06 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (6.52 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands
One still image is available for interpretation. The left adrenal gland is mildly enlarged (0.64 cm at cranial pole) (0.93 cm at caudal pole) (2.37 cm in length) with a normal shape and smooth peripheral contours. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is in normal size (1.03 cm at cranial pole) (0.54 cm at caudal pole) (2.47 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen
The spleen is normal in size (1.35 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver
The liver is subjectively enlarged with swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and subtly mottled in appearance, with small, ill-defined hypoechoic nodules/areas. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of mostly gravity dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The gastric lumen is mildly to moderately distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is segmentally dilated with gas and chyme (mild). A fluid-distended loop of bowel is observed in the mid- to caudal abdomen and is thought to be colon. The wall is normal in thickness with a normal layering pattern. There is no obvious evidence of an obstructive pattern.

Pancreas
The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen
The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Suspected diarrheic stool

- The hepatic parenchymal changes are nonspecific and could be consistent with a benign age-related process (i.e., vacuolar hepatopathy and/or regenerative nodular hyperplasia). Inflammatory disease is considered less likely (in light of the normal ALT). Infiltrative neoplasia (i.e., lymphoma) is possible but is also considered less likely.

Secondary Findings

- Mild left adrenomegaly

- Minor bilateral age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

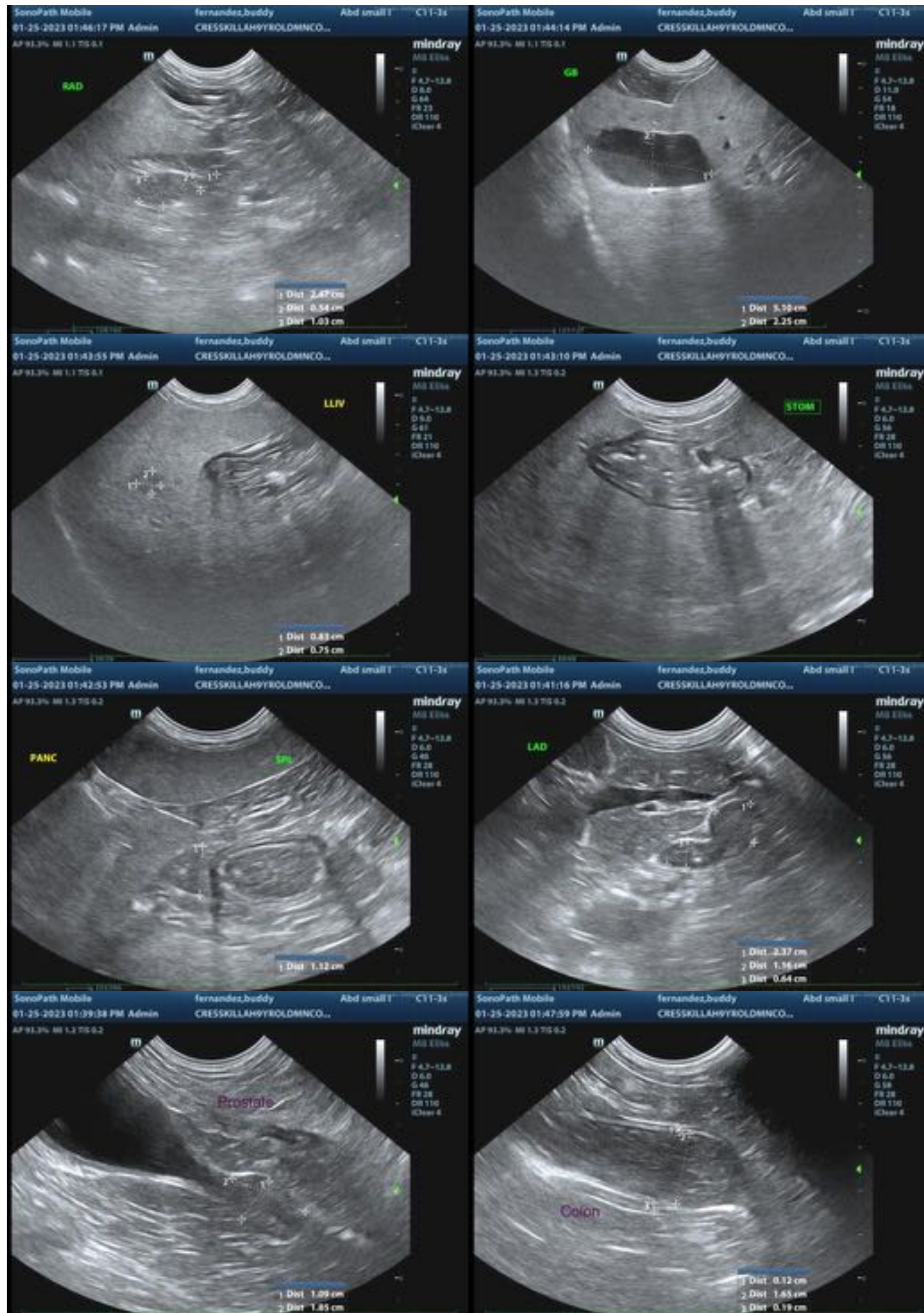
- Given the patient's clinical history, consider the following:

  1. Fecal evaluation for ova and Giardia
  2. Fecal PCR and infectious disease panel
  3. Prophylactic deworming with Fenbendazole
  4. Malabsorption panel, including serum cobalamin and folate, TLI and PLI
  5. Initiation of a probiotic and fiber supplement, along with a bland, easily-digestible diet, and symptomatic care.
  6. If the patient's GI signs do not improve with medical management and the above diagnostics are inconclusive, GI biopsies (i.e., endoscopic or surgical) may be warranted.

- Regarding the elevated ALP, consider a fine-needle aspirate of the liver (if clotting status is appropriate). A 25-gauge needle should be used. If aspiration is not pursued at this time, serial monitoring (i.e., every 3 months) of the liver values is recommended to assess for further increases in liver enzymes.

- Given the proteinuria, a UPC is recommended.

- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop.



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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com