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Clinical Sonography & Telecytology
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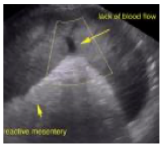
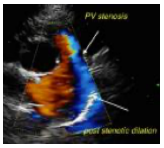
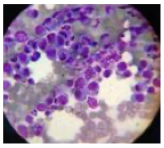
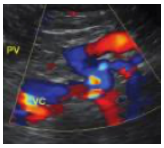

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PATIENT

Smalls Caplan

SPECIES

Canine

BREED

Mastiff

SEX

Intact Male

AGE

1 year

WEIGHT

128 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Aaron Lucas DVM, PhD

HOSPITAL NAME

Taylorsville VC

REFERRING VET

Aaron Lucas DVM, PhD

INVOICE

12109

DATE

1.26.23

PRESENTING CLINICAL SIGNS

History: Patient has a three-week history of mixed bowel diarrhea and occasional vomiting. Mild weight loss has been documented since GI signs have developed. Fecal analysis (with giardia antigen) was negative on 1/10/23. Patient was managed on bland diet (boiled boneless skinless chicken breast and boiled white rice) and Proviable Forte for 7 days with no improvement. Patient evaluated again on 1/19/2023 and rectal cytology revealed large number of clostridial spores per HPF on stained cytology. Patient had watery mucoid feces within colon upon rectal exam with no discomfort upon abdominal palpation. Incidentally, bilateral yeast otitis was identified upon exam. Patient was then treated with Metronidazole (15 mg/kg PO q 12 hours), continuing bland diet, famotidine (1mg/kg PO q 24 hours) and addition of psyllium fiber to diet (2 tablespoons daily). Vomiting has resolved. However, patient continues to have mucoid diarrhea with a frequency of 3-4 bowel movements daily.

Abnormal PE/Chem/CBC/UA Results: Complete blood count, blood chemistry, urinalysis and total T4 carried out on 1/19/2023 was unremarkable.

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 1-2 cm, are normal.

The prostate is enlarged (3.10 cm in width) with a normal shape. The parenchyma is hyperechoic relative to surrounding omental fat and slightly heterogenous in appearance. No focal lesions are observed. The prostatic urethra is not overtly dilated.

The left kidney is normal in size (8.44 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (9.68 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is small in size (0.47 cm at cranial pole) (0.44 cm at caudal pole) with a relatively 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 (0.91 cm at cranial pole) (0.64 cm at caudal pole) 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 (1.52 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

Liver
The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. The lumen of the descending colon contains granular-appearing fecal material. 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
Trace free fluid is observed. A 2.82 cm mesenteric lymph node is visualized.

Other
The caudal vena cava is subjectively dilated, relative to the abdominal aorta.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

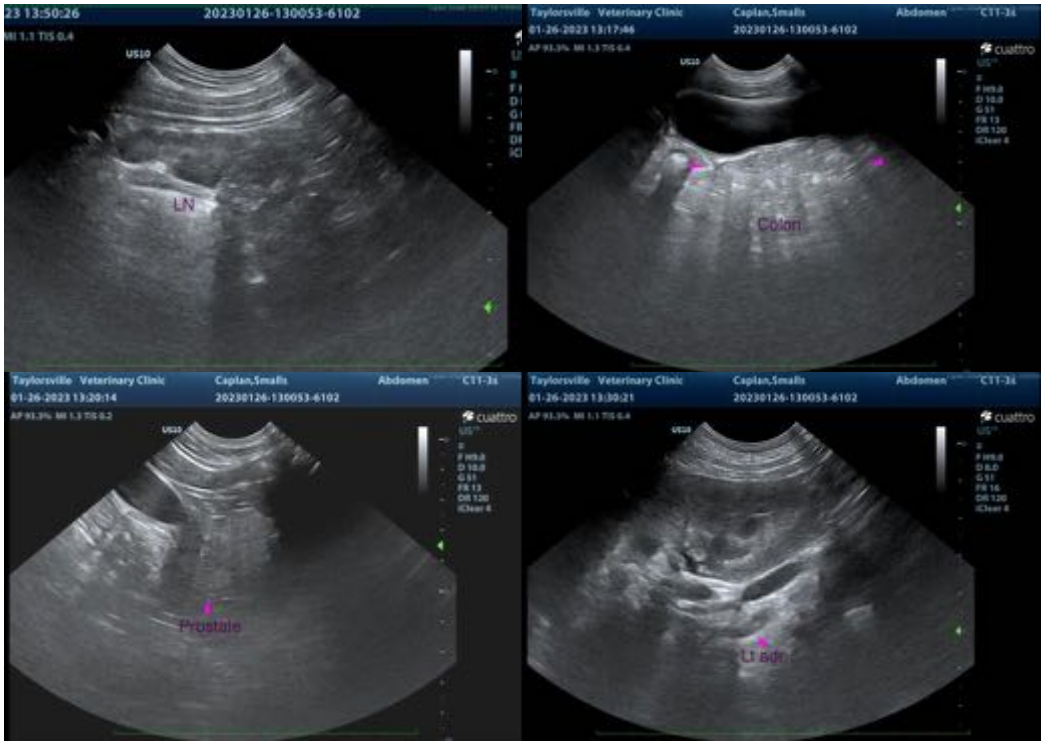
- An obvious cause for the patient's GI signs is not definitively identified in this study. Considerations include microscopic GI disease (i.e., food allergy, inflammatory bowel disease, infectious/parasitic disease), underlying metabolic issue, other.

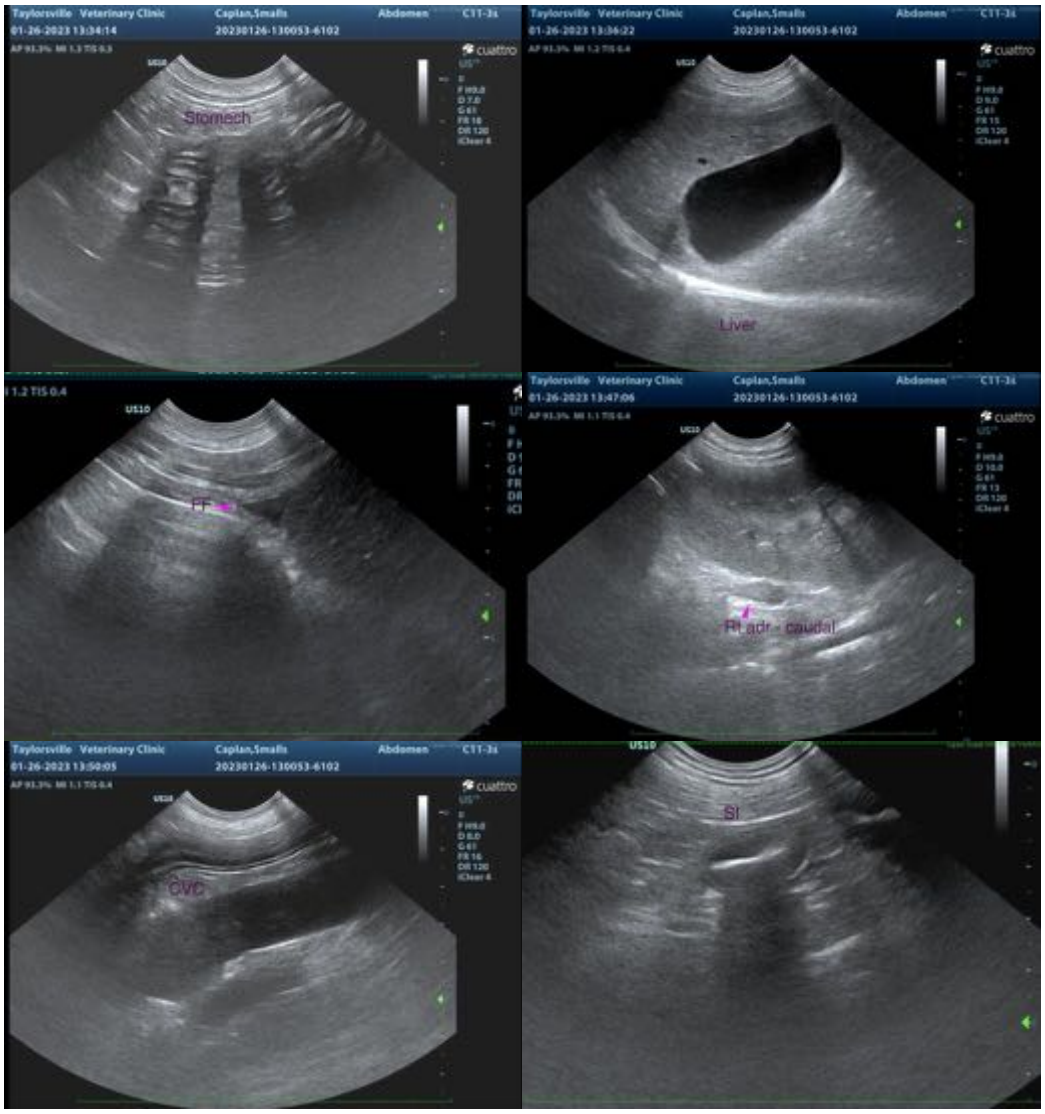
Secondary Findings

- The trace ascites may be secondary to increased vascular permeability, increased hydrostatic pressure or low oncotic pressure (less likely).
- The subjectively dilated caudal vena cava may be secondary to sedation (if applicable) or increased hydrostatic pressure (i.e., right-sided heart failure), obstruction of the cranial portion of the caudal vena cava, other.
- The prostate changes are as expected for a young, intact male.
- The prominent mesenteric lymph node is likely reactive.
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- The trace left pyelectasia may be secondary to pyelonephritis, fluid therapy (if applicable), other. Correlation with the patient's clinical history is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.
- Consider a fecal PCR infectious disease panel.
- Malabsorption panel, including serum cobalamin and folate, TLI and PLI
- A resting cortisol level is recommended to screen for atypical hypoadrenocorticism.
- Consider a 6-week limited antigen or hydrolyzed protein diet trial.
- Ultimately, endoscopic, or surgical biopsies may be necessary to get a definitive diagnosis.
- Given the trace ascites and dilated caudal vena cava, consider thoracic radiographs +/- an echocardiogram.





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)
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