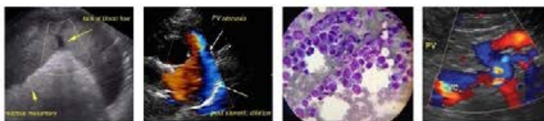


PATIENT

Tillie Smith

SPECIES

Canine

BREED

Blue Heeler

SEX

Spayed Femlae

AGE

1 Year

WEIGHT

24 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Eldale Vet Clinic

REFERRING VET

Dr. O'Connor/Mann

INVOICE

39467

DATE

7/13/22

PRESENTING CLINICAL SIGNS

June 29,2022 - FUO, anorexic after eating a fabric toy that appeared to pass. PE WNL with exception of elevated temp. 40.7C Signs continued for a number of days until hospitalized on IVF and supportive care. Similar hx of FUO and anorexia after an episode of diarrhea in Jan 2022. Has been on Clavaseptin and Metronidazole. Has perked up a bit. Was not fasted this morning.
Abnormal PE/Chem/CBC/UA Results: CBC results - marked neutrophilia; mild monocytosis; adequate platelet count (had been evidence of clumping on smear) Biochem - mild decrease in BUN; mild to mod potassium decrease; increased Na:K ratio; mild albumin decrease increased CK (possibly due to venipuncture artifact?)

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 (5.03 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 (5.42 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 right adrenal gland is normal in size (1.54 cm long x 0.90 cm at the cranial pole and 0.45 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (1.42 cm long x 0.39 cm at the cranial pole and 0.40 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

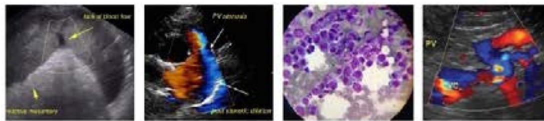
Spleen

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 normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.



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Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Hyperechoic mucosal fogging or speckling is noted. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease.

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 free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- Mucosal speckling – Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state. **This is a post-prandial study, which is the likely cause of the mucosal speckling.

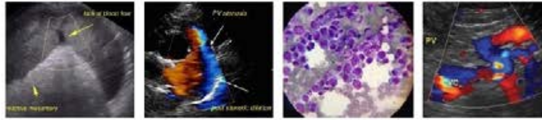
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Differentials for this patient's low albumin include urine loss, loss through the GI tract, decreased production by the liver and/or, given the concurrent fever, albumin can be decreased because it is a negative acute phase protein, and therefore can be slightly decreased during inflammation. Therefore, diagnostic considerations could include:

- Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

- 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, especially given the mild mucosal speckling.

- Bile acids could be considered to definitively rule out decreased liver function as a cause for the low albumin, especially given the concurrently low BUN (although the low BUN in this patient may be secondary to diuresis). However, given the fever, low albumin secondary to inflammation is considered probable, and further workup of the fever of unknown origin is recommended with considerations being given to broad-spectrum comprehensive infectious disease testing, thoracic radiographs, urine and/or blood cultures, and joint taps, etc.



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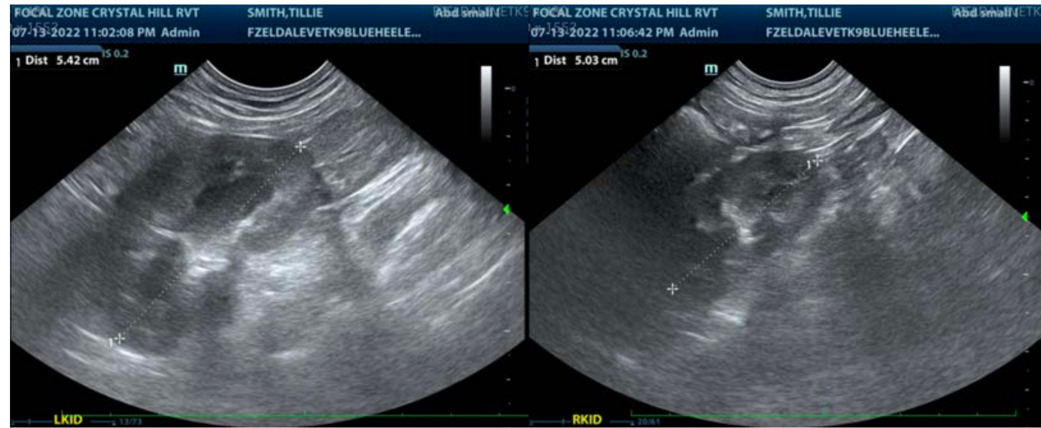

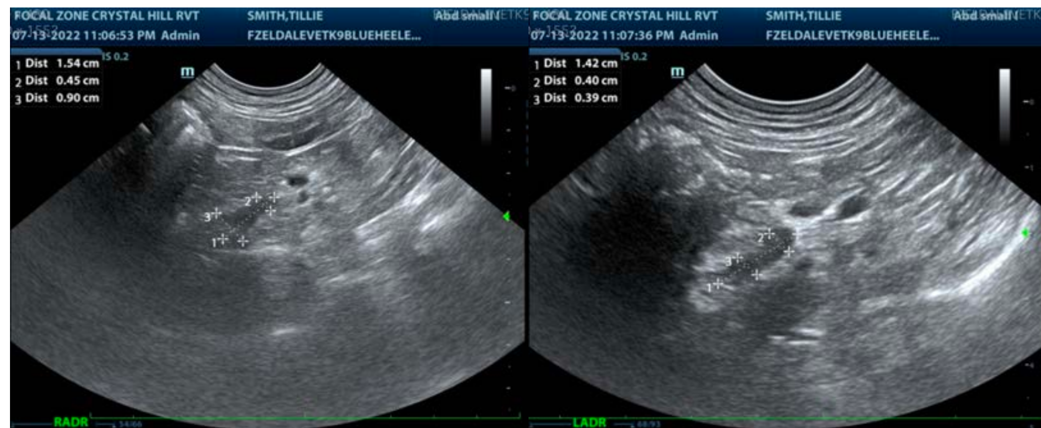

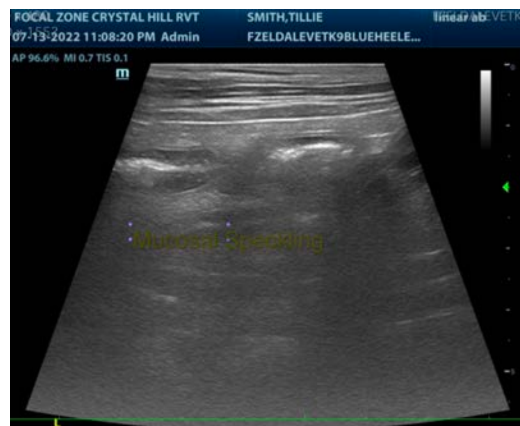

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
Beth.Johnson@sonopath.com