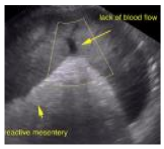
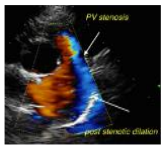
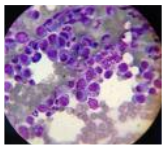
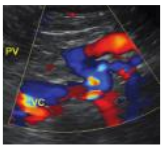

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1-800-838-4268 info@sonopath.com

PATIENT

Griffin Mulsoff

SPECIES

Canine

BREED

Pug

SEX

Neutered Male

AGE

6 Years

WEIGHT

25 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Union Lake VH

INVOICE

17935

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PRESENTING CLINICAL SIGNS

History: Chronic weight loss (11# over past 2 years), extreme hyporexia/anorexia. Chronic diarrhea that has resolved since Tylan powder begun. Eating very little, improved appetite only with Cerenia.

Abnormal PE/Chem/CBC/UA Results: Hx borderline low albumin 1/5/22=2.7 (2.7-3.9) 4/11/22=2.3 (2.3-4.0), WNL specCPL and baseline cortisol 6/29/22 WNL Texas A&M panel 7/3/2022 Antech chronic enteropathy panel consistent with enteropathy/IBD (increased Anti-calprotectin IgA, Increased Anti-gliadin IgA). HP diet was not pursued as recommended.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with primarily anechoic contents and occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick (0.54 cm thick). Mucosa is hyperechoic and irregular. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

The area of the prostate is examined without evident pathology.

Left kidney is normal is size (5.75 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.

Right kidney is normal is size (6.2 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

Left adrenal gland is normal in size (0.44 cm at cranial pole and 0.5 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.57 cm at cranial pole and 0.48 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

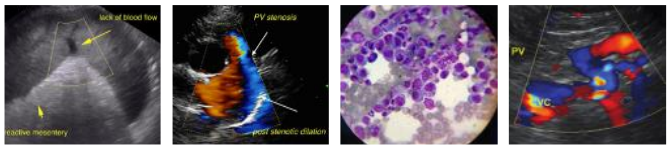
Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively 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.

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



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The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly to moderately fluid distended with 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, except for 2 focal areas of concentrically thick hypoechoic wall and loss of layering, measuring 1.3 cm thick in one area and 1.6 cm thick in the other area. This may be two separate bowel masses or one larger bowel mass but cannot be definitively joined in these images. Small intestinal motility appears adequate (1-3 contractions per min). 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 soft stool.

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

A mild amount of anechoic free fluid is present and diffusely enhanced hyperechoic mesentery noted. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Infiltrative bowel mass, possibly two bowel masses, which is concerning for infiltrative neoplasia, such as lymphoma versus other. However, given this patients reportedly mildly low albumin, a protein losing enteropathy, which can be seen with benign lipogranulomatous lymphangitis, which results in bowel masses is also possible.

- Free fluid is likely the result of hypoalbuminemia, however, focal peritonitis/vasculitis resulting in the free fluid cannot be ruled out.

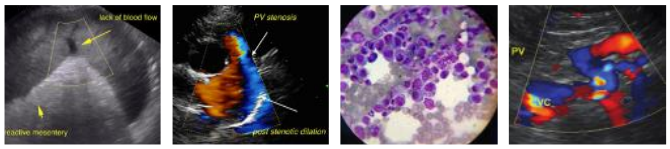
Secondary Findings

- Chronic Cystitis - Urinary bladder wall changes are most consistent with chronic cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely give the location and diffuse nature of the changes.

- 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

A fine needle aspirate of the bowel mass (es) is recommended, as was reportedly already obtained with submission for cytology recommended.



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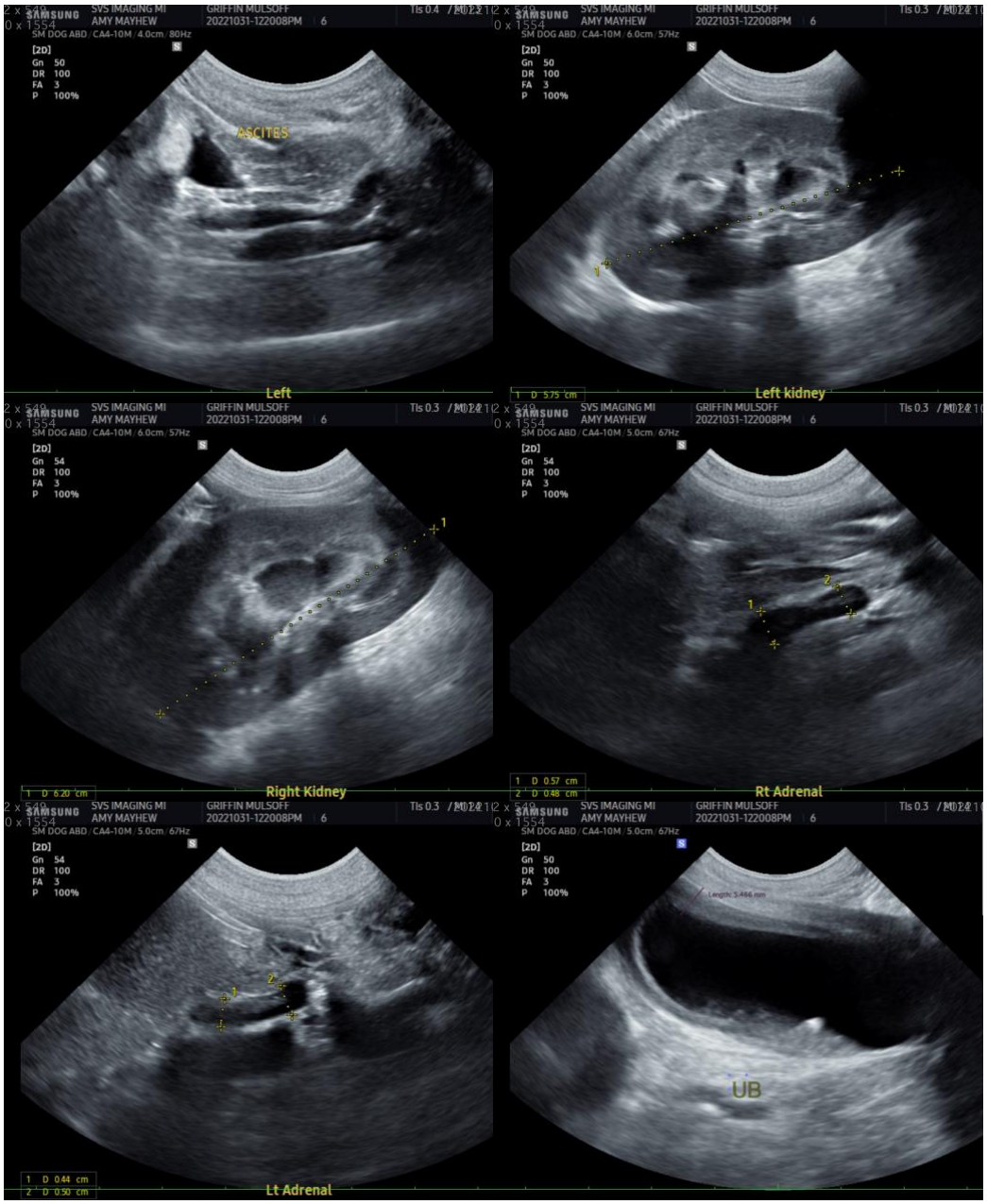
Additionally, given the newly reported low albumin, a recheck gastrointestinal malabsorption panel is recommended despite normal results several months ago.

If not recently evaluated, 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 to rule out concurrent proteinuria.

If a diagnosis is not obtained cytologically, an exploratory laparotomy for bowel mass removal/biopsy/resection and anastomosis may be necessary to definitively diagnose benign lipogranulomatous lymphangitis versus other benign disease versus infiltrative neoplasia.



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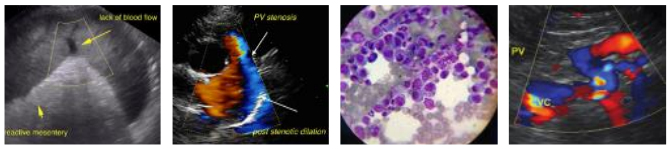

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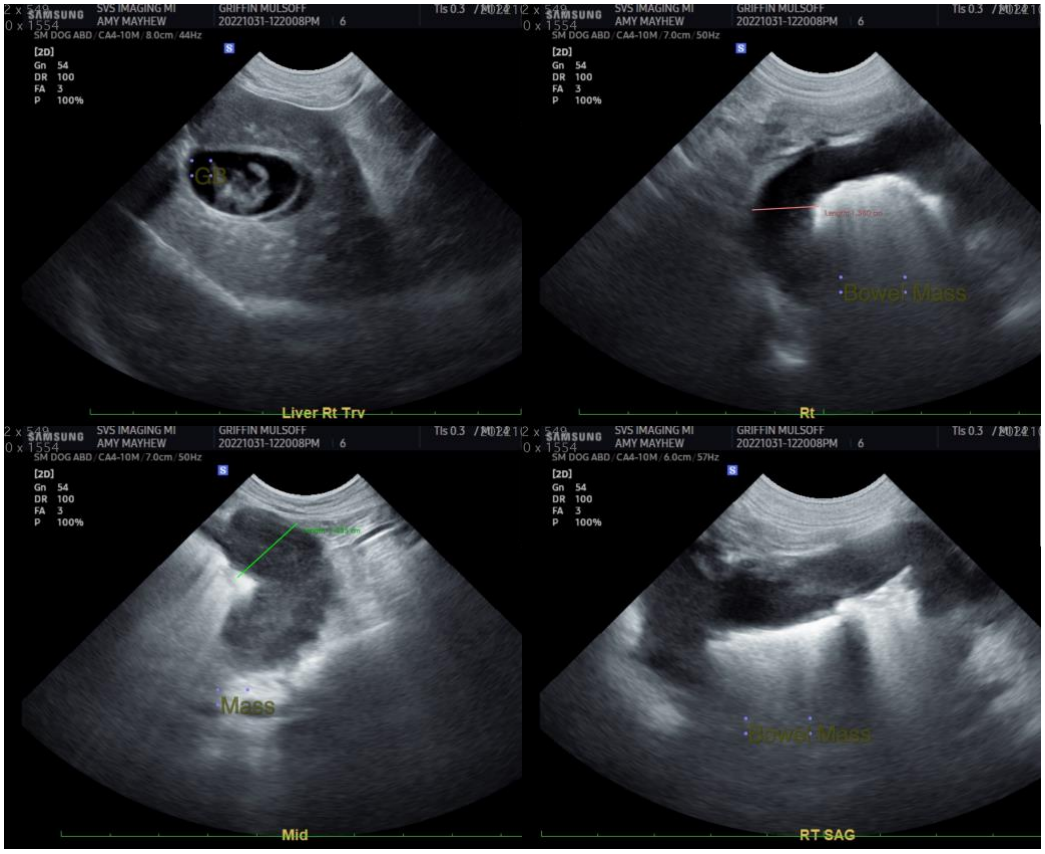

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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