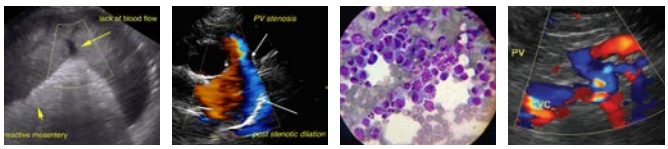
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Mila Vazquez

SPECIES
Canine

BREED
Mixed

SEX
Spayed Female

AGE
3 Years

WEIGHT
24.4 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
Ramapo Valley AH

REFERRING VET
Dr. Katara

INVOICE
40674

DATE
8/24/22

PRESENTING CLINICAL SIGNS

Patient presents for suspect acute kidney insult of unknown origin.
Abnormal PE/Chem/CBC/UA Results: BUN 91, creat. 2.4, Phos. 7.0, Ca 7.9, SDMA 26.4.

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 (4.78 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 (5.02 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 (2.2 cm long x 1.48 cm at the cranial pole and 0.64 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 (1.49 cm long x 0.39 cm at the cranial pole and 0.34 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 normal to possibly subjectively small 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.

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 empty 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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.

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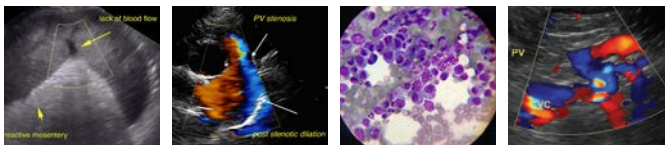

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The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

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. (See other).

Free Abdomen

There is a very large amount of anechoic free fluid throughout the entire abdomen. In the area of the pancreas, mesentery is edematous, clumped and hyperechoic, which could be suggestive of mild acute pancreatitis. However, it is more likely secondary to the marked free fluid noted.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- Large amount of anechoic free fluid – Differentials include increased hydrostatic pressure due to decreased venous return or increased arterial pressure, potentially secondary to portal hypertension or cardiac disease, or lymph obstruction, versus decreased oncotic pressure if the albumin is low, which wasn't reported, versus a vasculitis, paraneoplastic fluid, hollow viscus organ rupture, other.

- Possibly mild microhepatica. However, this appearance could be altered due to the large amount of free fluid present.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's reported azotemia, to further differentiate prerenal versus renal azotemia, a 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.

Given the concurrent hypocalcemia, especially if hypoalbuminemia is present, 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.

Bile acids could be considered to further investigate hepatic function, given the mild microhepatica suspected.

Fluid sampling for cytology +/- culture, if indicated, is recommended if not already evaluated.

Finally, thoracic radiographs and an echocardiogram are recommended if another cause of the free fluid is not identified beforehand in order to rule out cardiopulmonary disease as a component.

In the meantime, given the volume of fluid, therapeutic abdominocentesis is recommended in addition to symptomatic/supportive medical management of clinical signs while further working up the cause of the fluid.

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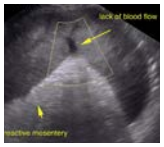
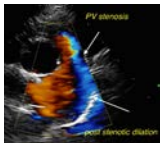
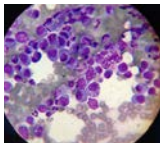
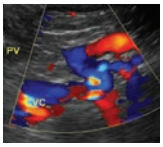

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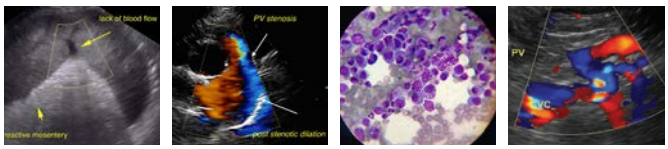

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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