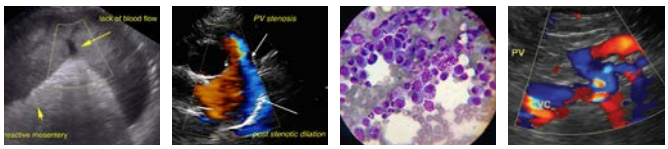
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Snickers Millett

SPECIES
Canine

BREED
Pit

SEX
Spayed Female

AGE
4

WEIGHT
31.5

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Jordyn Walters

HOSPITAL NAME
Viking Vet Hospital

REFERRING VET
Dr. Natasha Stanley

INVOICE
44564

DATE
8/2/23

PRESENTING CLINICAL SIGNS

Anorexia, vomiting. Hospitalized x 4 days. Liver enzymes progressively worsening. leukopenia, thrombocytopenia. Treating: fluids, cerenia, ondansetron, unasyn, baytril, doxycycline, SamE, acetylcysteine

Abnormal PE/Chem/CBC/UA Results: Lepto PCR pending. Diarrhea PCR pending

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 (7.62 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 (7.83 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 adrenal glands are unable to be well visualized in these images.

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

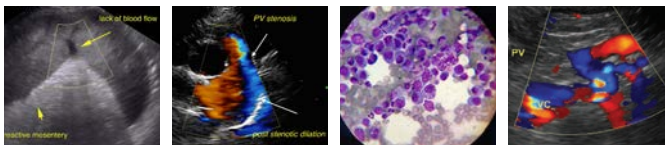
Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is small/almost empty/non-distended. The wall is mildly thick, slightly irregular and hyperechoic. It measures 0.53 cm thick. Luminal contents are primarily anechoic with some suspended echogenic debris noted. 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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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 a moderate amount of free fluid noted in these images.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- **Hypoechoic hepatomegaly with concurrent biliary changes** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered. The biliary changes could be normal patient variant combined with an empty gallbladder, but cholangitis contributing to this patient's laboratory changes and clinical signs, etc. can't be ruled out.

- Free fluid of unknown origin/cause is present.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

As is reportedly already pending, testing for Leptospirosis is recommended.

Ideally, sampling of the liver would be considered if patient's coagulation status can be improved, which could potentially happen with fresh frozen plasma, Vitamin K, a manual platelet count to help determine how severe the true cytopenia is, etc. If that happens, a fine needle aspirate of the liver could be considered, or ultimately if a diagnosis is not obtained cytologically, a liver biopsy.

Alternatively, given the concurrent cytopenias, bone marrow cytology could be considered, which offers less risk of uncontrollable hemorrhage in the face of a coagulopathy.

In the meantime, in addition to addressing this patient's coagulopathy as described above, continued supportive/symptomatic medical management of an acute hepatopathy as well as supportive care of clinical signs (as is reportedly in place) is recommended.

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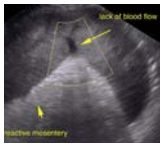
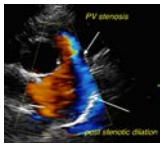
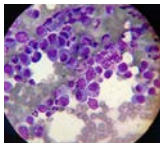
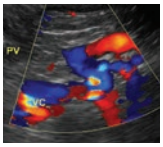

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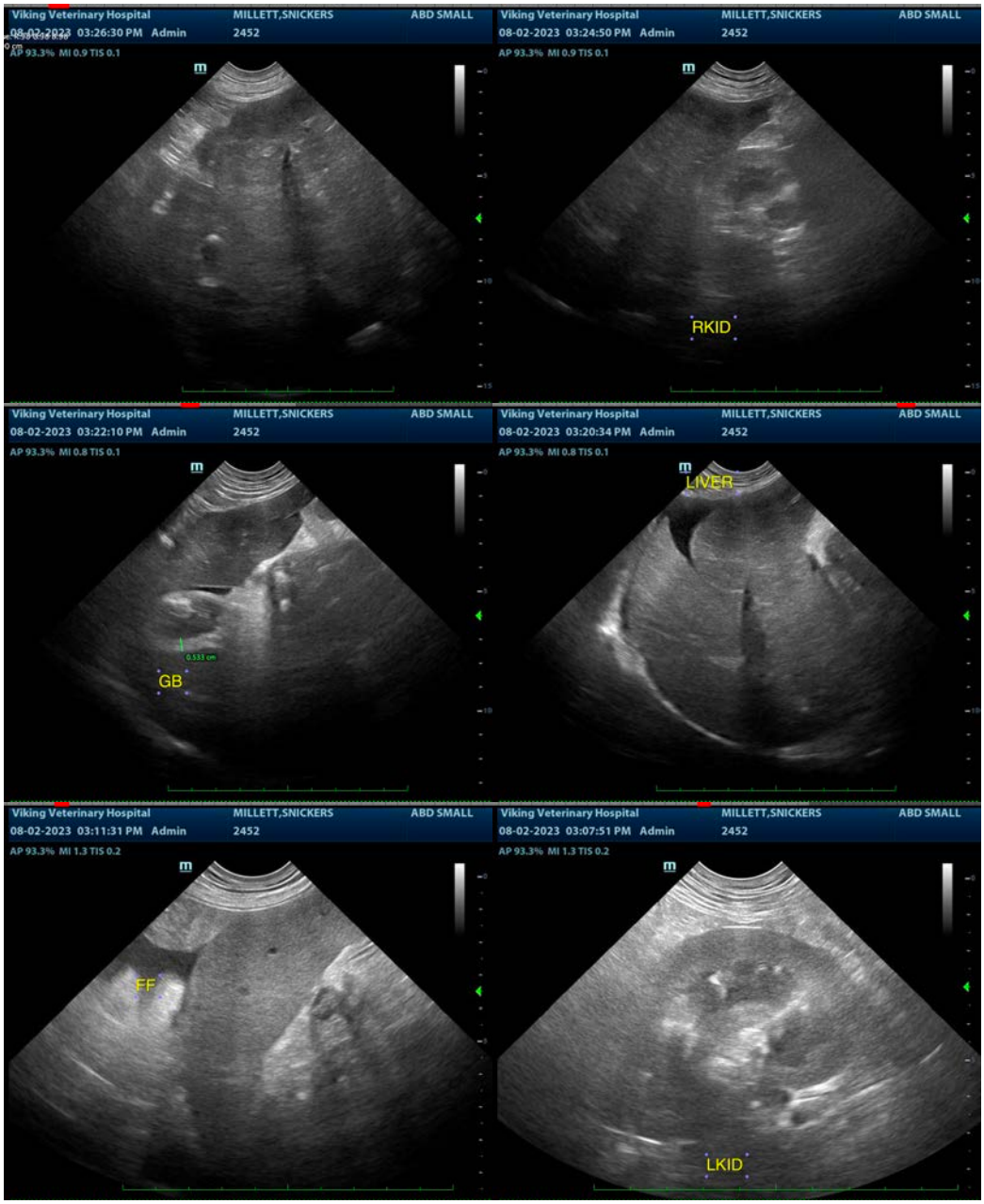

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
info@sonopath.com