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Clinical Sonography & Telecytology
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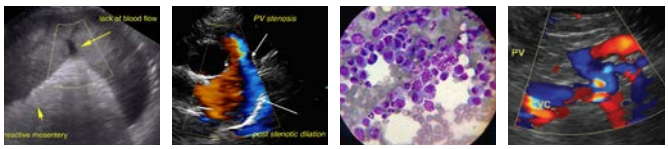


SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Izzy Curshen

SPECIES
Feline

BREED
DSH

SEX
Spayed Female

AGE
14 Years

WEIGHT
9 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
Glen Rock VH

REFERRING VET
Dr. Scott Stekler

INVOICE
44555

DATE
1/26/23

PRESENTING CLINICAL SIGNS

Patient presents for weight loss and elevated liver enzymes. Current meds: 5mgs SID, mirtazapine 1.875 mgs EOD.

Abnormal PE/Chem/CBC/UA Results: CBC/Chem: WNL.

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 (4.08 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 (3.61 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 area of the right adrenal gland was examined without evident adrenal gland pathology.

The left adrenal gland is normal in size (0.29 cm at the cranial pole and 0.31 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

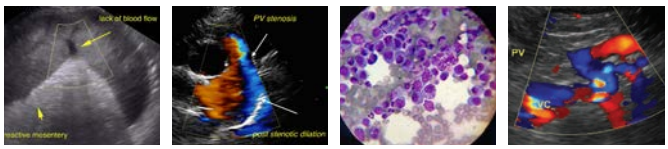
Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is 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 visible stomach wall is normal in thickness 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 intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen is mildly distended with echogenic



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non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction or foreign material noted.

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

Pancreas

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

In the caudal abdomen, there is an approximately 1.0 cm in diameter hypoechoic structure surrounded by enhanced hyperechoic mesenteric fat, believed to be an enlarged mesenteric lymph node.

In the cranial abdomen, there is a discrete, round, hypoechoic structure measured 0.50 cm x 0.70 cm, believed to be a hepatic or possibly pancreaticoduodenal lymph node.

ULTRASONOGRAPHIC FINDINGS

- **Hypoechoic hepatomegaly** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- **Inflammatory bowel disease (IBD) pattern –** Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
- **Cranial abdominal and mesenteric lymphadenopathy** – Both reactive lymphadenopathy as well as infiltrative neoplasia are differentials and cannot be differentiated without tissue sampling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

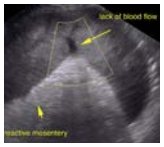
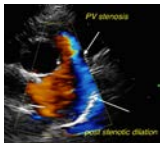
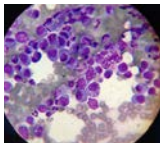
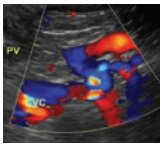
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

T4 and free T4 is also recommended if not recently evaluated, given this patient's reported history of increased liver enzymes and weight loss.

Fine needle aspirates of the liver as well as the enlarged lymph nodes could be considered if patient's coagulation status is appropriate, and the lymph nodes can safely be reached. The mesenteric lymph node is probably easier to reach than the cranial abdominal lymph node.

Ultimately, if a diagnosis is not obtained cytologically, biopsies of the gastrointestinal tract as well as potentially the lymph nodes and liver may be necessary to definitively diagnose and therefore manage this patient's suspected infiltrative disease affecting the bowel.

In the meantime, if the liver enzymes are increased, there is also some suspicion for possible hepatic lipidosis. Treatment recommendations include fluid therapy, anti-emetics, gastroprotectants, hepatic

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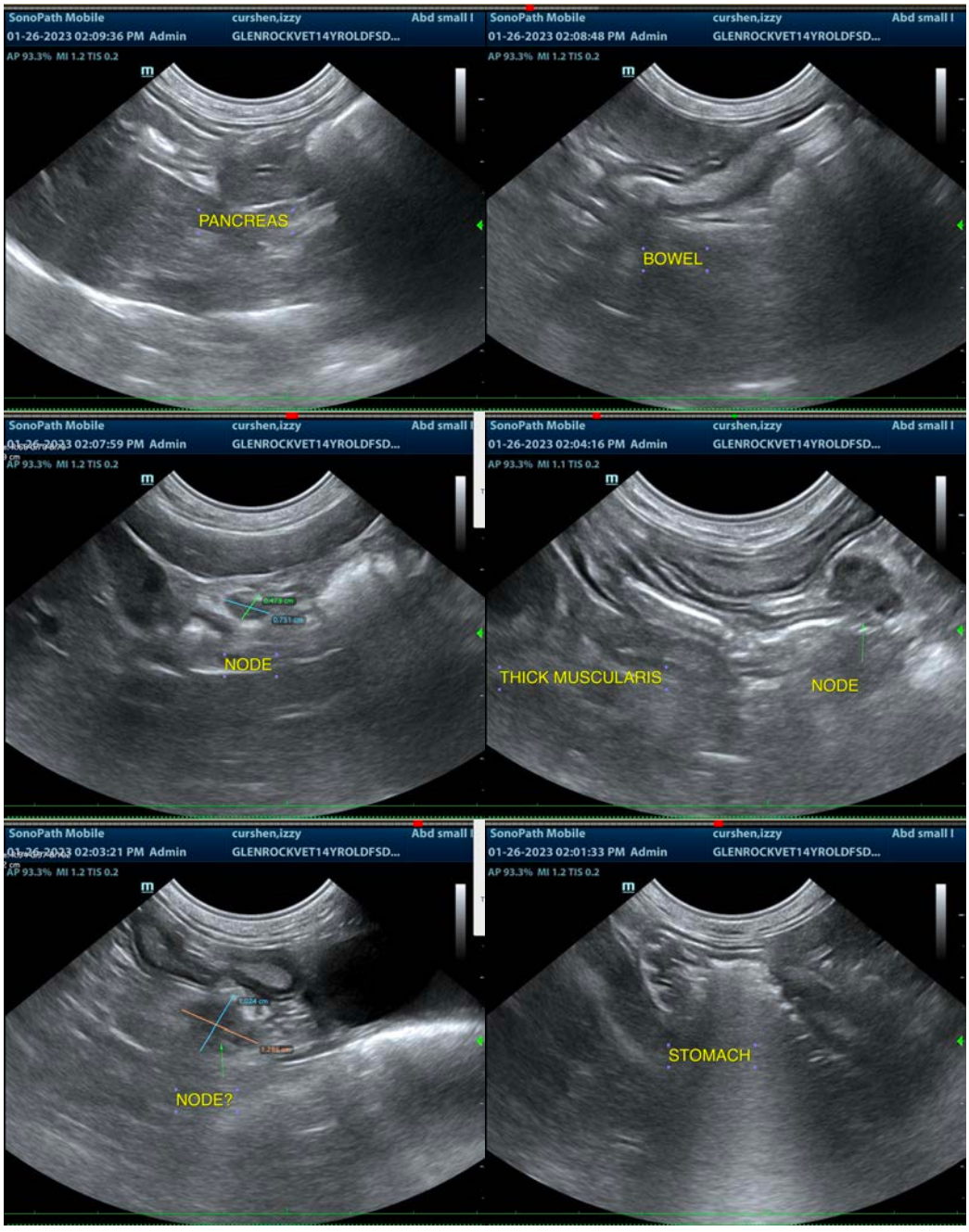
nutraceuticals such as ursodiol and/or Denamarin, and broad spectrum antibiotics. Nutritional support is critical to prevent/manage concurrent hepatic lipidosis, so appetite stimulants and/or, if indicated, feeding tube placement is also recommended.



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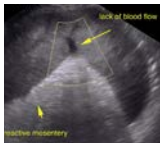
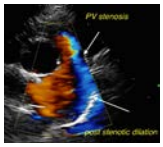
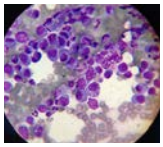
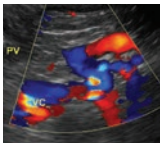

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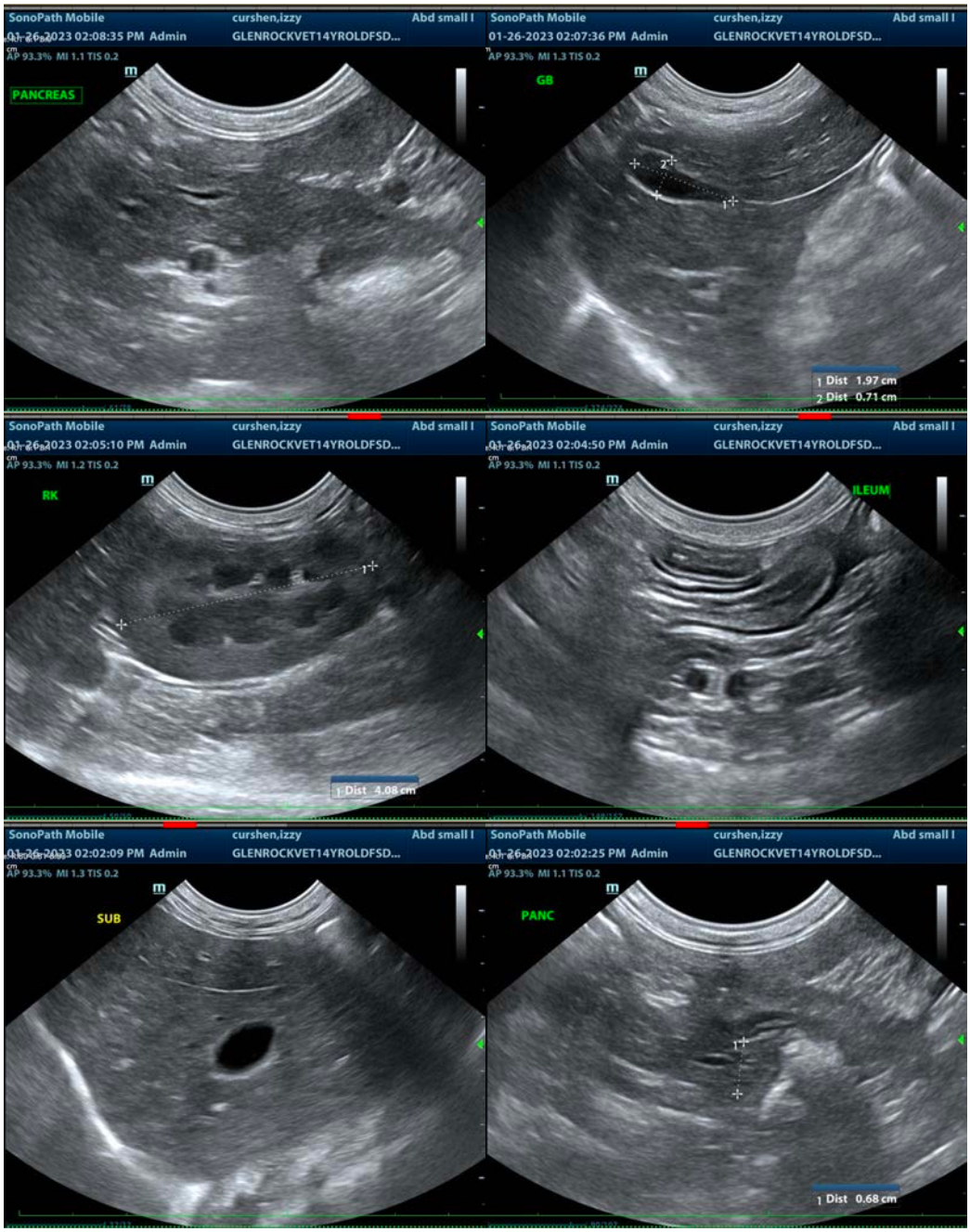

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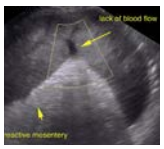
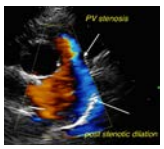
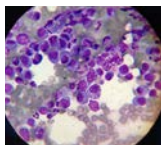
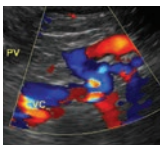

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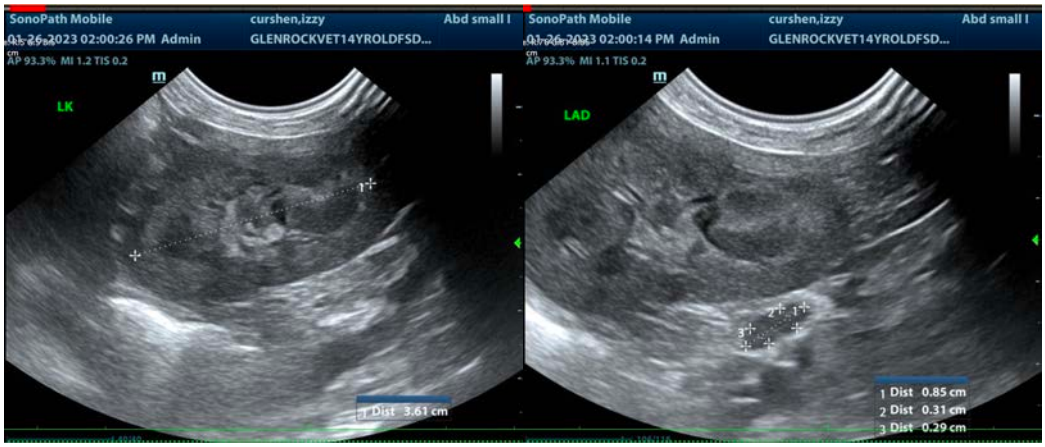

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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