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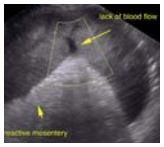
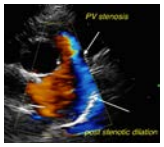
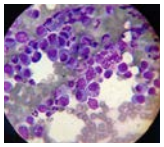
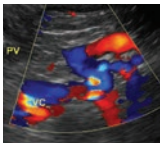
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Frank-N-Furter Gaffin

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

5 Years

WEIGHT

8.4 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Susan Lincoski

HOSPITAL NAME

University Drive VH

REFERRING VET

Dr. Susan Lincoski

INVOICE

40500

DATE

8/16/22

PRESENTING CLINICAL SIGNS

Weight loss, 4# since lst year. Some vomiting 1 week prior to exam 8/11, but owner attributed to switch to different kibble. Alt and GGt elevations, and due to finances owner opted medical treatment first line, and he was started on clavamox and metronidazole. Today his weight is slightly up, at 8.4#. Owner decided to do further workup after all.
Abnormal PE/Chem/CBC/UA Results: ALT elevation 504, GT=5, all else wnl. PE reveals sarcopenia and BCS 3/9.

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 (3.85 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 (3.6 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 (0.34 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The area of the left adrenal gland is examined without evident pathology.

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

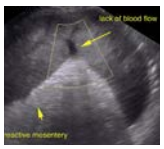
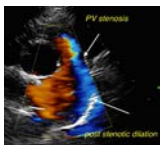
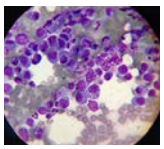
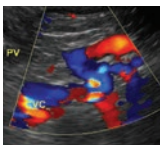
Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended, almost empty in size. The wall is mildly thick and hyperechoic in appearance. 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 mildly thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular,

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thick and hyperechoic, without evident loss of layering appreciated. The lumen is empty with no evidence of obstruction or foreign material.

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.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

- **Hypoechoic hepatomegaly** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered. The mildly hyperechoic, thickened gallbladder wall may be related as well to resolving cholangitis/cholangiohepatitis due to the recent course of antibiotics.

- **Mild 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.

- **Reactive mesenteric lymph nodes –** infiltrative neoplastic disease cannot be ruled out but is considered less likely.

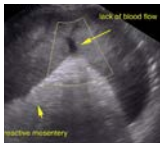
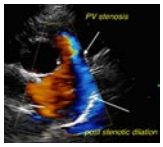
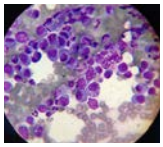
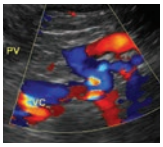
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If further diagnostics are elected, a fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate. However, given the concern for possible cholangitis/cholangiohepatitis, if further empirical management is preferred over further diagnostics at this time, continued treatment with antibiotics with addition of hepatic nutraceuticals, including Ursodiol, could be considered first, especially if the liver enzymes have improved over the most recent course of antibiotics. If the liver enzymes have progressed over the most recent course of antibiotics, then the recommendation for a fine needle aspirate is stronger.

Given the mild bowel changes and reported weight loss, 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.

Ideally, biopsies of the GI tract, being sure to include ileum, if possible, should be considered if patient's gastrointestinal signs/weight loss continued beyond management of the suspect concurrent cholangitis/cholangiohepatitis to definitively diagnose and therefore manage the possible infiltrative bowel disease.

If biopsies cannot be obtained, empirical therapies could include diet change, empirical deworming with a 5 day course of Panacur, cobalamin supplementation (unless cobalamin level is evaluated and

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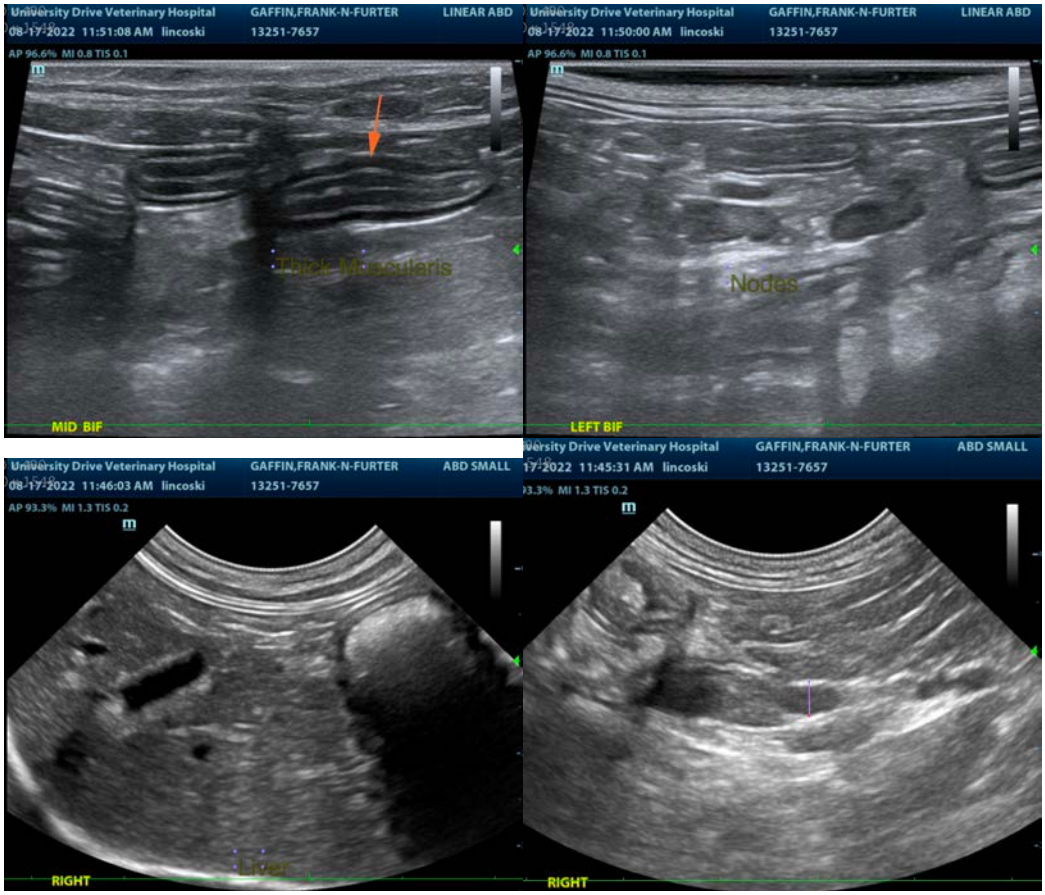
supplementation is not warranted) and prednisolone (if not contraindicated based on patient contraindications, co-morbidities, etc.).



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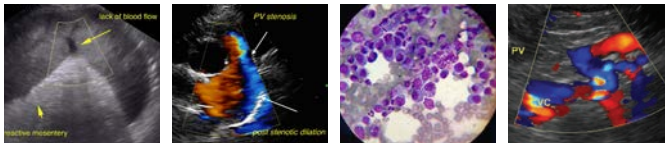

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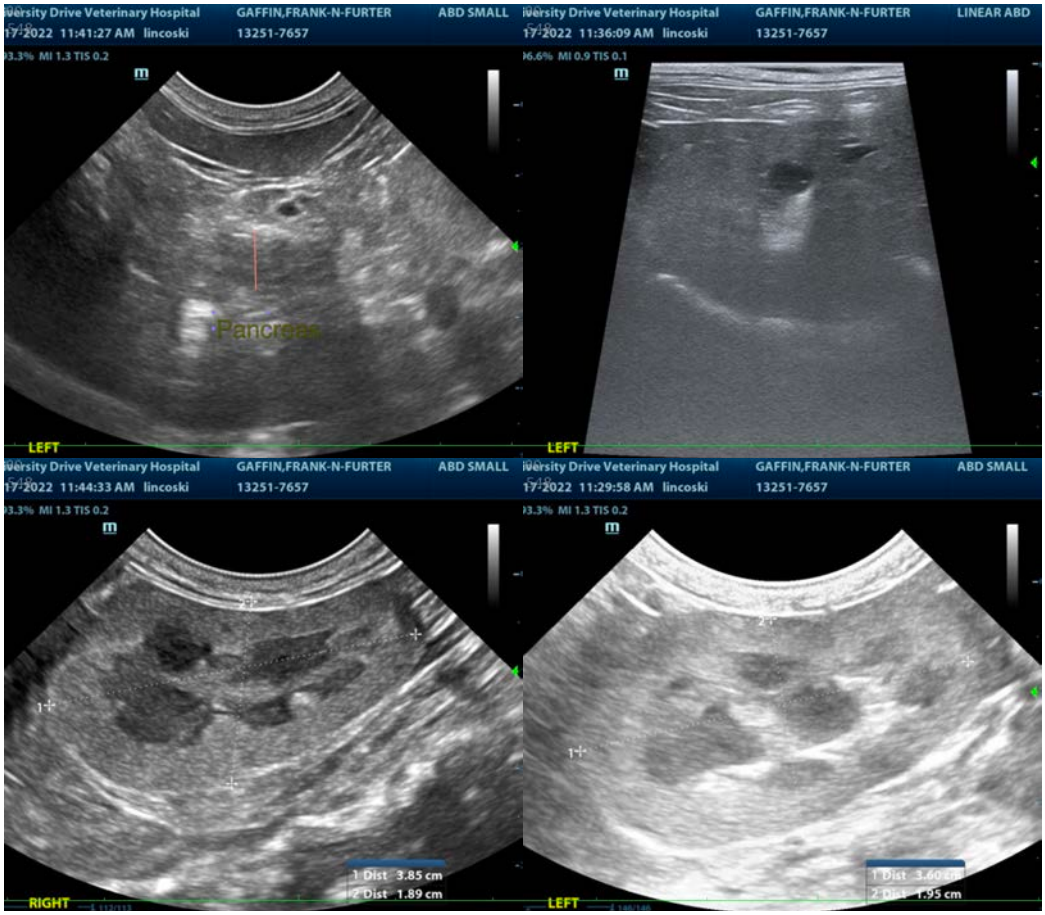

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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