


**PATIENT PRESENTING CLINICAL SIGNS**

**Theodore Valerio**  
**SPECIES** History: Patient was seen for unexplained wt loss in 6/22 - had CBC/ Chem / T4 (normal at that time) and AUS and GI panel - AUS showed IBD change in GI tract and mild pancreatic inflammation. GI panel showed low B-12. Began B-12 supplement + hypoallergenic diet - signs improved until recently, now losing weight again, and on CBC / Chem / T4 / U/A - ALT 329, AST 76, else normal.

Feline

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
**DSH Urinary System**

The urinary bladder is moderately distended with anechoic urine, and no luminal sediment is present. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). No masses, calculi or mucosal irregularities are noted.

**SEX**

Neutered Male

**AGE**

13 years

Both kidneys are hyperechoic and exhibit mildly decreased cortico-medullary differentiation. There is no evidence of nephrolithiasis, mineralization, pyelectasia or hydronephrosis. The proximal ureters are not visible (normal). The left kidney is 4.5 cm in length. The right kidney is 4.9 cm in length.

**WEIGHT**

12.8 lbs

**Adrenal Glands**

The adrenal glands are both identified in their normal locations. They are normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. The left adrenal gland height is 4.7 mm at the caudal pole. The right adrenal gland height 4.0 mm at the caudal pole.

**INTERPRETED BY**

Tam Mengine, DVM,  
 DABVP (canine/feline  
 practice)

**Spleen**

The spleen is of appropriate size and has a normal, homogenous parenchyma with a smooth, continuous capsular surface. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal. Thickness at the splenic hilus is normal at 8.0 mm.

**IMAGING PERFORMED BY**

Dr. Tam Mengine

**Liver**

The liver is of appropriate size and shape, with sharp borders and a mildly coarse parenchymal echotexture that is hypoechoic to the spleen. There are small mineralized foci within the intrahepatic bile ducts. The portal and hepatic vasculature are of normal size and appearance with no evidence of congestion or thrombosis.

**HOSPITAL NAME**

Stoney Creek VC

The gallbladder is minimally distended with anechoic contents and a small amount of freely-moveable echogenic sludge. The wall is thickened to 2.5 mm without evidence of rupture. The cystic and common bile ducts are normal.

**REFERRING VET**

Dr. Beth Henry

**Gastrointestinal**

The stomach is empty. The gastric wall is 2.5 mm with normal deviations due to rugal folds and exhibits appropriate wall layering. The pylorus is of normal appearance.

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The small bowel has diffuse change to the normal thickness, with an appropriate 1:3 muscularis to mucosa ratio. Wall measurements are increased up to 3.2 mm (jejunum) and 3.5 mm (duodenum). Overall wall layering is preserved.

**DATE**

7.20.23

The visible portions of the colon are of normal thickness, up to 1.3 mm, with intact wall layering. The ileocecal junction is visualized and appears normal.

**Pancreas**

The entirety of the pancreas is swollen and hypoechoic, with an anechoic region of necrosis (measuring 1.20 cm) in the distal aspect of the right limb. The pancreatic duct appears dilated.



**PATIENT** *Free Abdomen*

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**Free Abdomen**

There is no evidence of free fluid within the peritoneal cavity. The mesenteric lymph nodes were mildly enlarged, up to 1.2 cm, with normal short to long axis ratio and appropriate echogenicity. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Choledocoliths and thickened gallbladder wall, consistent with cholangiohepatitis
- Pancreatic inflammation with suspected abscess formation
- Thickened small bowel consistent with prior diagnosis of infiltrative bowel disease

**Secondary Findings**

- Chronic renal changes

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The inflammatory changes in the liver, pancreas and GI tract are suggestive of feline “triaditis” syndrome. The presence of an abscess in the pancreas may necessitate draining and culture for resolution. Additional recommendations include:

- A complete GI panel and bile acids testing
- supportive care including fluid therapy, antiemetics, analgesics, appetite stimulants (if needed) and cobalamin supplementation are warranted.
- trials with a novel protein or hydrolyzed diet
- Treatment with Denamarin and ursodiol are recommended, and treatment with antibiotics such as amoxicillin-clav and/or a fluoroquinolone could be considered as empiric treatment for cholangiohepatitis.
- Empiric treatment with prednisolone at 2-4 mg/kg/day could be considered, particularly if response to other treatments is lacking.
- Definitive diagnosis would require biopsy of the affected tissue, ideally with intra-operative ultrasonographic guidance. If there is concurrent lymphadenopathy, ultrasound-guided sampling of the lymph node using a 25 or 22G needle could be considered.

The changes in the kidneys are consistent with chronic renal disease. Findings should be correlated with laboratory values, IRIS staging and clinical signs.



Figure 1: Ultrasound image of the liver showing a thickened gallbladder wall and choledocoliths.

Figure 2: Ultrasound image of the pancreas showing inflammation and a suspected abscess formation.



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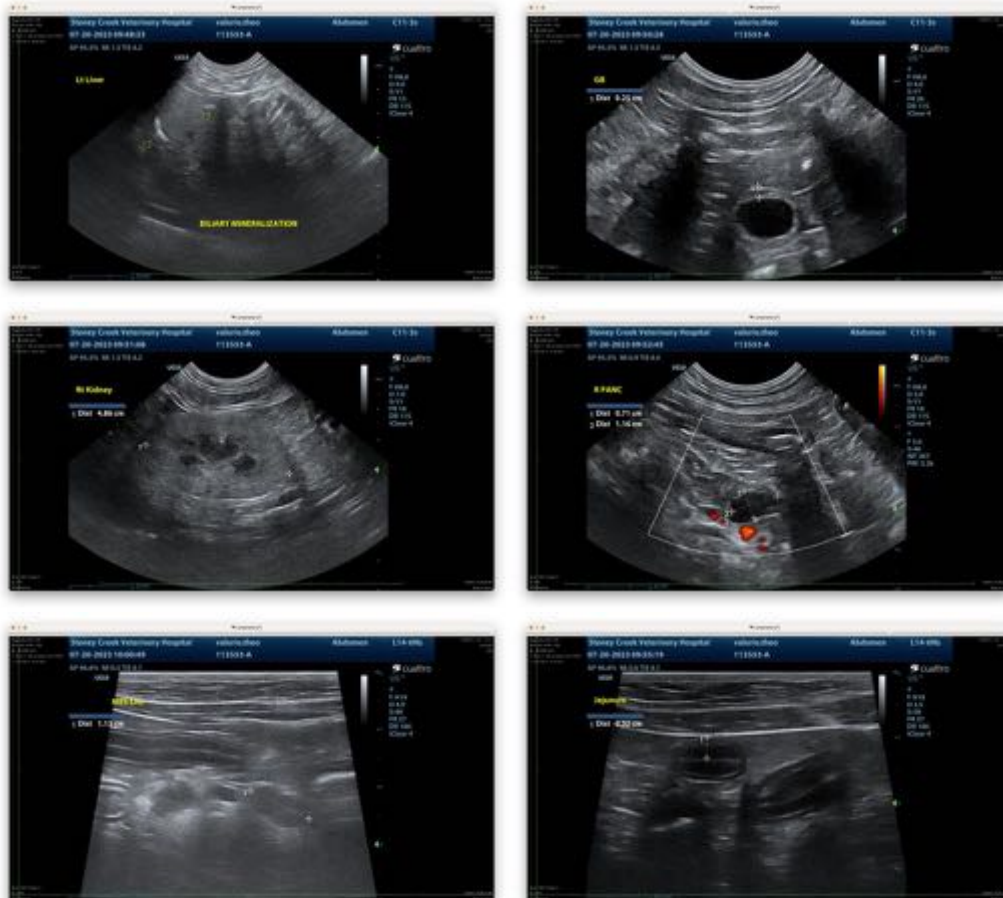
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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