



**PATIENT**

Max Mathews

**SPECIES**

Feline

**BREED**

DLH

**SEX**

Neutered Male

**AGE**

13 years 7 months

**WEIGHT**

15

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Dr. Nottingham

**HOSPITAL NAME**

All Creatures AH of  
South Hill, Inc.

**REFERRING VET**

Katy Green DVM

**INVOICE**

12905

**DATE**

12/29/21

**PRESENTING CLINICAL SIGNS**

At least 1 week history of decreased appetite (shares food dish with another cat) and complete anorexia for several days. BCS = 8/9. 2# weight loss in past 2 months - unsure if it has been more rapid. No bowel movements for several days. Vomiting water after drinking. Lethargic. Abnormal PE/Chem/CBC/UA Results: Physical exam: overweight with rapid weight loss, icteric sclera and gingiva, mid to cranial abdominal pain on moderate palpation. ALT = 342, ALP = 147, Choles = 276, GGT = 27, T bili = 11.0. fPL strong positive snap test, HCT 27.1%, non regenerative. WBC 17.39 k temp 100.8 IH Complete panel with UA, T4 and PLi

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation was free of pathology.

Normal size was present in the kidneys. Mild asymmetrical caudal left kidney margination with potential infarction was present. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.2 cm in length. The right kidney measured 4.7 cm in length.

**Adrenal Glands**

No overt pathology in area of the left and right adrenal glands although not definitively visualized.

**Spleen**

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted. The spleen measured 0.88 cm in width.

**Liver/ Gallbladder**

The liver exhibited generalized enlargement yet maintained symmetrical capsule contour. Subtle generalized increased hepatic parenchyma echogenicity exhibiting mild to moderate coarse echotexture was present. Lobar biliary tree dilation was present along with concurrent biliary tree mineral vs. adjacent hepatic parenchymal mineralization. The gallbladder was distended in size containing moderate congealed nonmineralized mucus. The common bile duct exhibited marked torturous dilation exiting the gallbladder involving the cystic biliary duct extending caudally towards the level of the duodenum. Nonmineralized mucus, as well as subtly shadowing mineral, was noted within the dilated common bile duct lumen. The common bile duct dilation measured 0.7 up to 1.4 cm.



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***Gastrointestinal***

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with apparent formed feces and luminal gas in lumen.

***Pancreas***

The left limb of the pancreas exhibited uniform mild hyperechoic parenchyma compared to adjacent peripancreatic omentum.

***Free Abdomen***

Subtle evidence of reactive mesentery was noted around the dilated tortuous common bile duct. No overt effusion was noted. No obvious evidence of significant lymphadenopathy was present.

**ULTRASONOGRAPHIC FINDINGS**

***Primary Findings***

- Hepatopathy exhibiting lobar biliary tree dilation and likely lobar mineral
- Distended gallbladder with moderate congealed luminal mucus
- Marked torturous common bile duct dilation extending caudally towards the duodenum with mucoduct in areas of luminal mineral
- Suspect chronic pancreatitis

***Secondary Findings***

- Bilateral chronic renal changes with potential left kidney cortical infarction

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Although the area of the duodenal papilla was not definitively visualized, the presence of marked torturous common bile duct dilation containing mucus and mineral, distended gallbladder, with congealed luminal mucus, and lobar biliary tree dilation often associated with chronic obstruction is strongly consistent with post hepatic biliary obstruction. Suspected mineral or mucus at the level of the duodenal papilla may be considered most probable, given this presentation, although the possibility of obstructive duodenal papilla pathology cannot be definitively excluded.

Laparotomy with gross inspection of the common bile duct and duodenal papilla with potential for common bile duct flush or common bile duct redirection technique, manual expression of the gallbladder, as well as hepatic biopsies are warranted. A coagulation panel is recommended prior to surgical considerations. Assessment of serum cobalamin and folate levels may be considered, given the patient's weight loss, to rule out concurrent intestinal disease.



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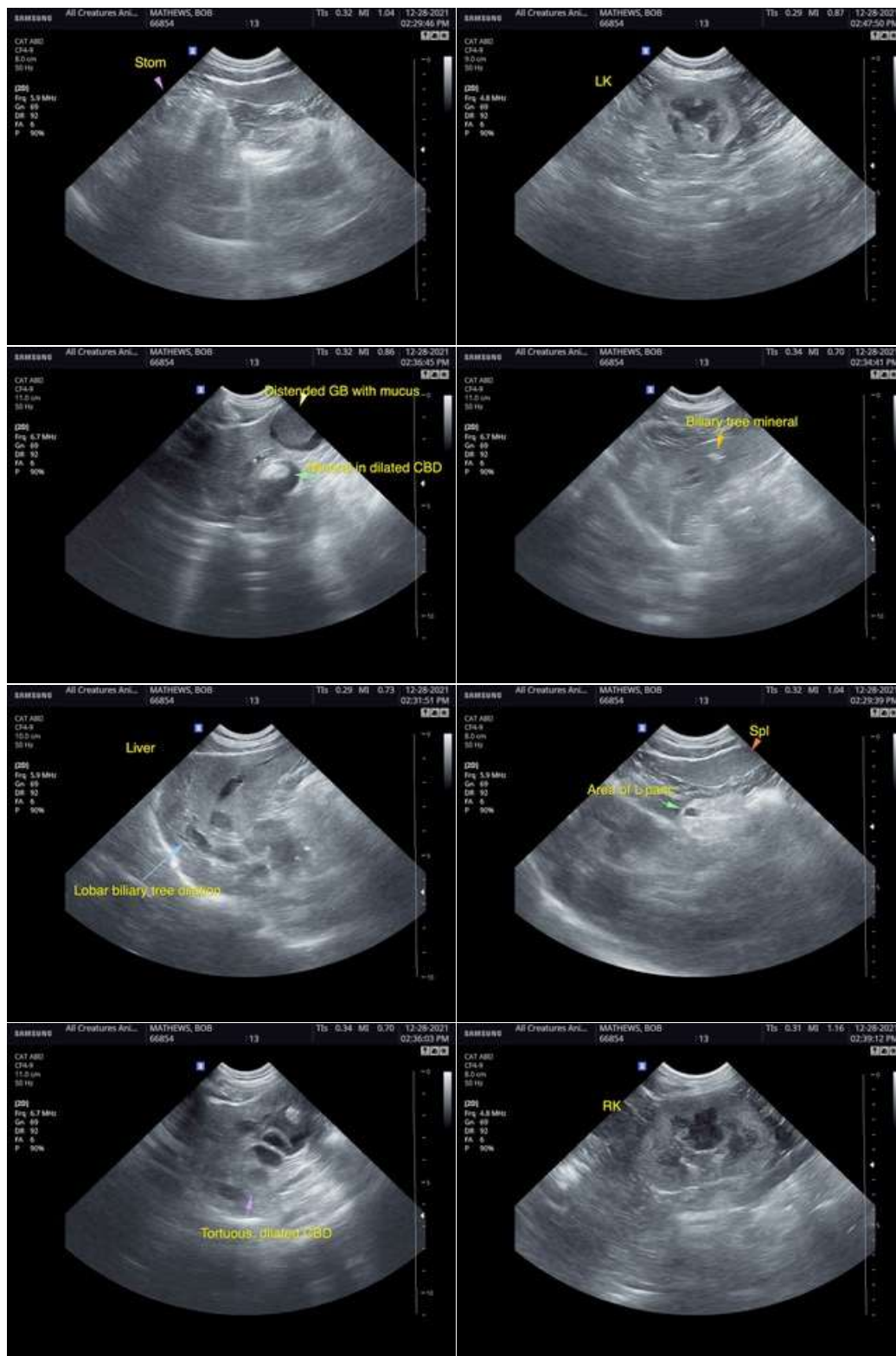
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**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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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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**info@SonoPath.com**

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