



## PATIENT PRESENTING CLINICAL SIGNS

Phi Wollensak

### SPECIES

Feline

### BREED

Siamese

### SEX

Spayed Female

### AGE

12 Years

### WEIGHT

9.1

### INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

### IMAGING PERFORMED BY

Haley Harasimowicz

### HOSPITAL NAME

Waterbury VH

### REFERRING VET

Miranda Fritz

### INVOICE

23484

### DATE

7/19/23

P has history of obstipation/megacolon and normally maintained on RC GI fiber response food, cisapride, and mirlax. P presented Friday 7/14 for suspect constipation and decreased appetite for 2 days. Confirmed constipation on x-rays. P given enema, SQ fluids, cerenia and mirtazapine. P successfully passed large amount of stool Friday. On Monday 7/17 p presented for anorexia since Saturday and lethargy. P dehydrated and painful on abdominal palpation. P hospitalized for IVF and further diagnostics. Elevated LEs and abnormal fPLI. Xrays repeated and NSF. P has been hospitalized since Monday. Appetite started to improve today but LEs and Tbili increasing.

Abnormal PE/Chem/CBC/UA Results: PE: doughy, painful abdomen, dehydrated 5%, mild jaundice today CBC: suspect band neutrophils Chem 7/17: ALT 487, TBili 2.8, Glu 262 Chem 7/18: ALT 269, Tbili 3.2, GGT 7, Glu 217 fPLI: Abnormal UA: USG 1.048, glucosuria, pH 7.0 Full body x-rays: nsf

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal. The pelvic urethra was imaged 2.0 cm beyond the cystourethral junction.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some mild age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 4.1 cm. The left kidney measured 4.02 cm.

### Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 0.27 cm.

### Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

### Liver

The **liver** in this patient revealed an overdistended gallbladder with suspended debris surrounding coarse hepatic architecture and irregular swelling. Dilated lobar biliary duct was noted, consistent with post hepatic obstruction. No evidence of passive congestion in the liver. Heterogenous parenchymal changes were noted around the common bile duct and pancreas. Tissue thickening was noted at the



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duodenal papilla, measuring approximately 1.0 cm. The common bile duct was dilated to 0.56 cm with tortuous cystic duct and echogenic debris consistent with mucoduct.

***Gastrointestinal***

**SPECIES**

Feline

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted. Tissue thickening was noted at the duodenal papilla, measuring approximately 1.0 cm.

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***Pancreas***

**SEX**

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The **pancreas** was hypoechoic, irregular and nodular. Heterogenous parenchymal changes were noted around the common bile duct and pancreas.

***Free Abdomen***

**AGE**

12 Years

**Free fluid** was noted in the abdomen, which is significantly concerning.

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

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- Heterogenous parenchymal changes were noted around the common bile duct and pancreas. Pancreatitis is likely, underlying carcinoma is possible.
- Swollen irregular liver with free fluid and chronic cholangitis/cholecystitis pattern with some level of posthepatic obstruction.
- Age-related renal changes

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

I believe there are multiple issues in this patient regarding the liver. Diffuse hepatic disease, such as cholangitis or potential for underlying hepatic lymphoma are possible. Coagulation panel and 25G screening FNA of the general hepatic parenchyma is recommended, however, if no neoplasia is found, then direct exploratory cholecystectomy and common bile duct lavage are warranted with direct inspection of the tissue thickening at the duodenal papilla. This may be an inflammatory polyp; however, underlying carcinoma is possible. Prognosis is very guarded. Abdominocentesis, analysis and cytospin of the free fluid is also warranted to ensure neoplasia is not an issue or potentially bile peritonitis.

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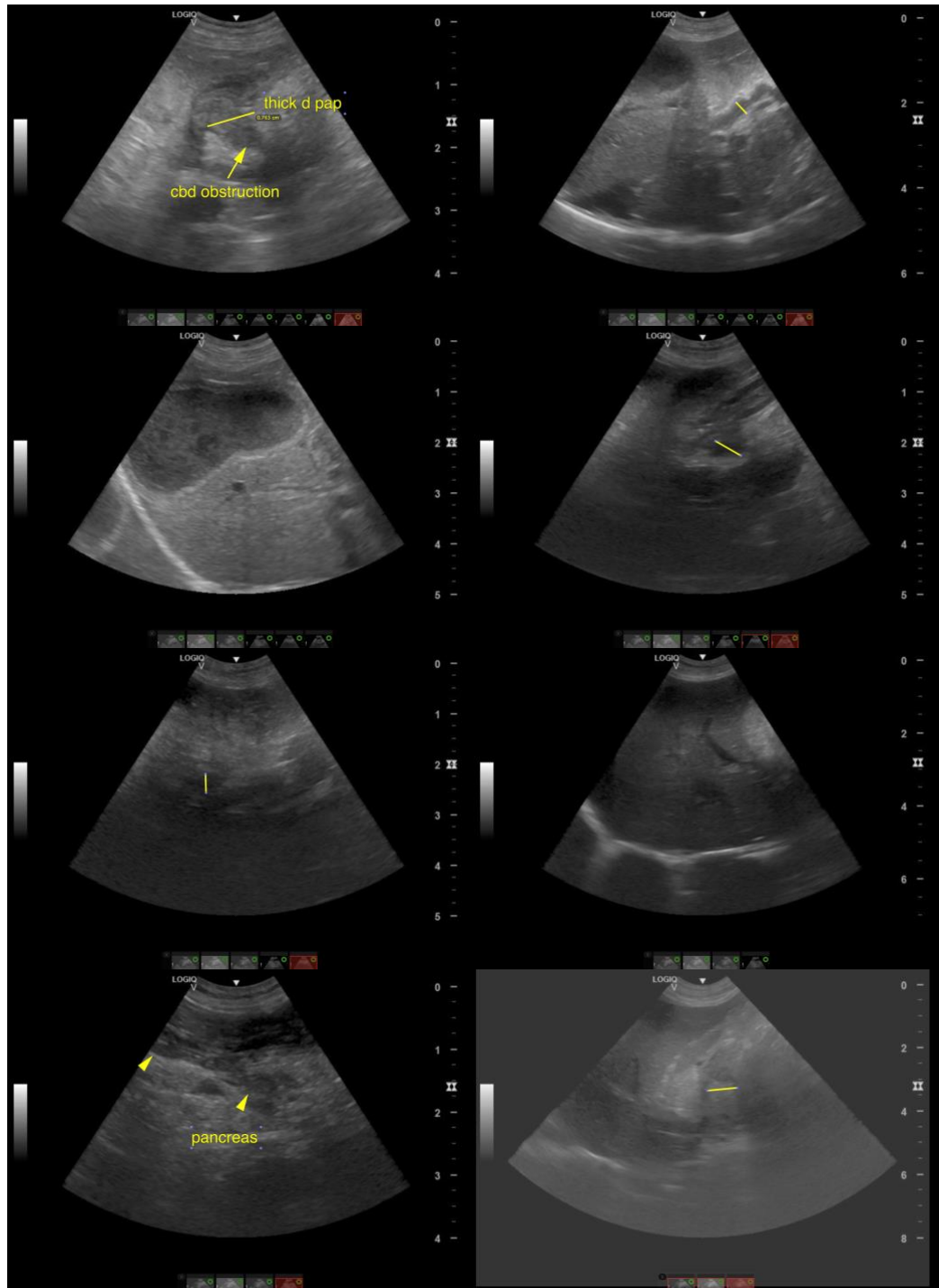
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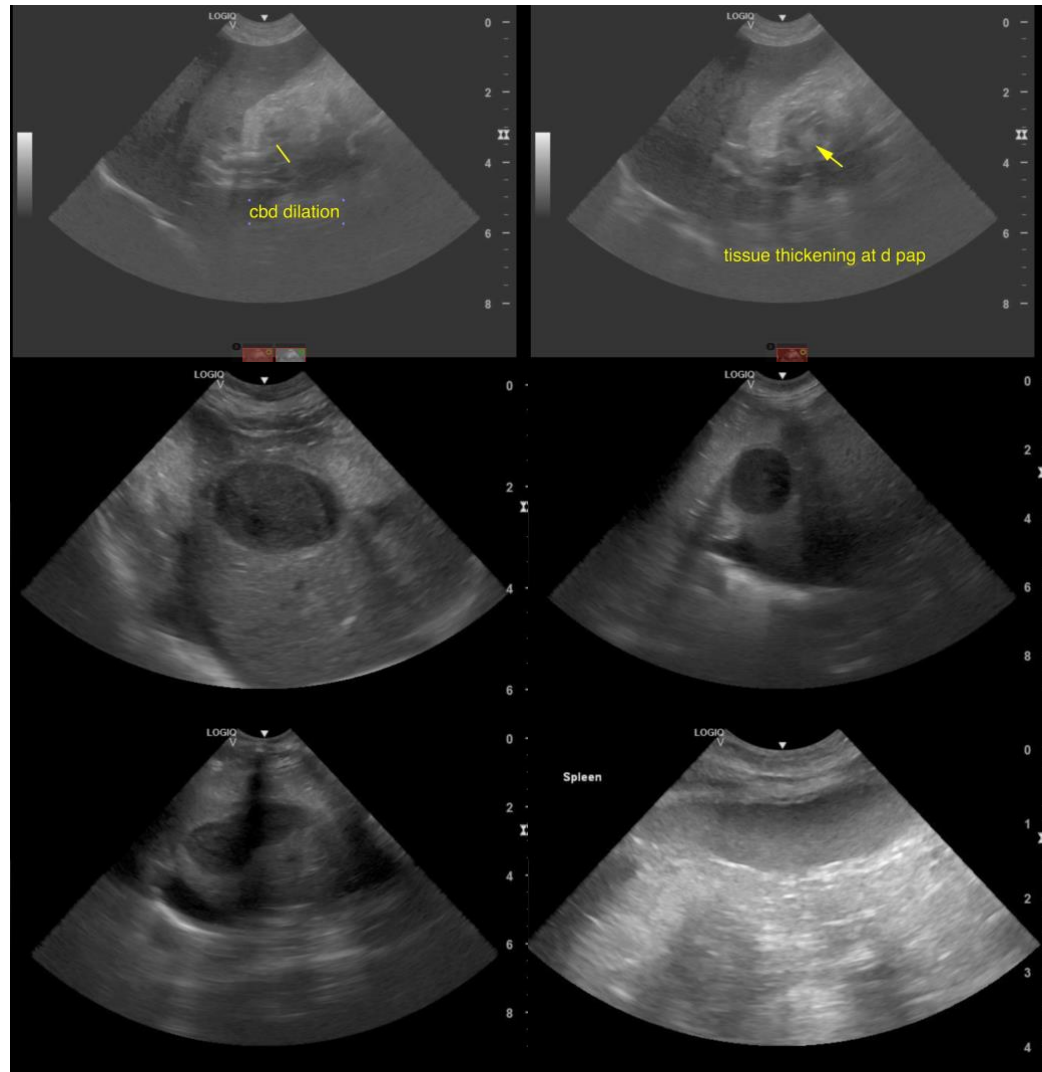
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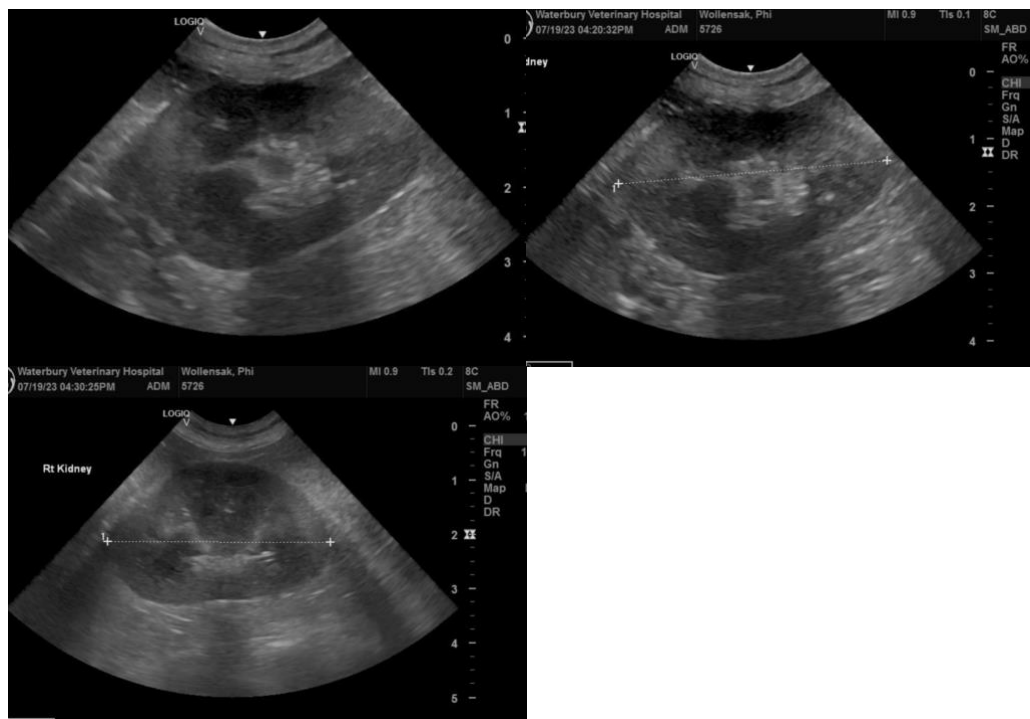
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
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