



## PATIENT

Lilou Bay

## SPECIES

Canine

## BREED

French Bulldog

## SEX

Spayed Female

## AGE

13 Years

## WEIGHT

25 lbs

## INTERPRETED BY

Beth Johnson, DVM  
DACVIM

## IMAGING PERFORMED BY

Dr. Allison Maxey

## HOSPITAL NAME

Evergreen Animal  
Hospital

## REFERRING VET

Dr. Allison Maxey

## INVOICE

75495

## DATE

5/27/26

## PRESENTING CLINICAL SIGNS

48-72 hour duration of lethargy, decreased appetite, difficulty walking, and breathing heavy. Hx of glaucoma which is managed with ocular eye medications.

Abnormal PE/Chem/CBC/UA Results: PE findings - QAR, weak, lethargic. Delayed CP responses in left hindlimb, normal in other hindlimbs. Reluctant to ambulate but when walking hindlimbs are stiff with mild hindlimb ataxia. Abdomen tense and distended. Mild increased respiratory effort. CBC - leukocytosis (23,000/ul), neutrophilia (~19,000/ul), monocytosis (~1,500/ul) Chemistry - elevated liver enzymes (ALT 366, ALP > 2000, GGT 22) Urinalysis pending. Started treatment for possible hepatopathy with antibiotics, also started treatment for possible IVDD with anti-inflammatory dose of prednisone.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is adequately 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 is size (4.3 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 is size (4.6 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 (0.43 cm at cranial pole and 0.36 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.59 cm at cranial pole and 0.58 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. 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) with a diffusely mildly coarse architecture and subtly increased portal markings. Mildly mixed echogenic changes are noted diffusely. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. Some of the debris is shadowing, consistent with mineral/sand debris and cholecytoliths with no visible evidence of obstruction noted in these images at this time. The wall of the



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gallbladder appears as a thin hyperechoic/calcified rim casting a distinct distal acoustic shadow. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### **Gastrointestinal**

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material, or infiltrative disease; however, visualization is partially inhibited by gas.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

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

### **Pancreas**

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### **Free Abdomen**

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

### **ULTRASONOGRAPHIC FINDINGS**

- An obvious cause for the subtle liver changes is not identified in these images. Microscopic disease such as Leptospirosis, bacterial cholangiohepatitis, chronic active hepatitis, copper-associated hepatotoxicity, other hepatotoxicity, other reactive hepatopathy, infiltrative neoplasia (considered unlikely), etc. cannot be definitively ruled out.
- Moderate amount of gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili. Some of the debris is consistent with mineral/sand debris, but no visible evidence of obstruction.
- Porcelain gallbladder – Porcelain (calcified) gallbladder is an uncommon finding in companion animals and has been observed as both an incidental finding and associated with biliary neoplasia. In humans, porcelain gallbladder can be a manifestation of chronic gallbladder disease, chronic cholecystitis, intramural hemorrhage with subsequent calcification, imbalances in calcium metabolism, and even giardiasis. This finding should be interpreted in combination with any clinical signs and/or laboratory changes suggestive of biliary disease and/or calcium dysregulation, etc.



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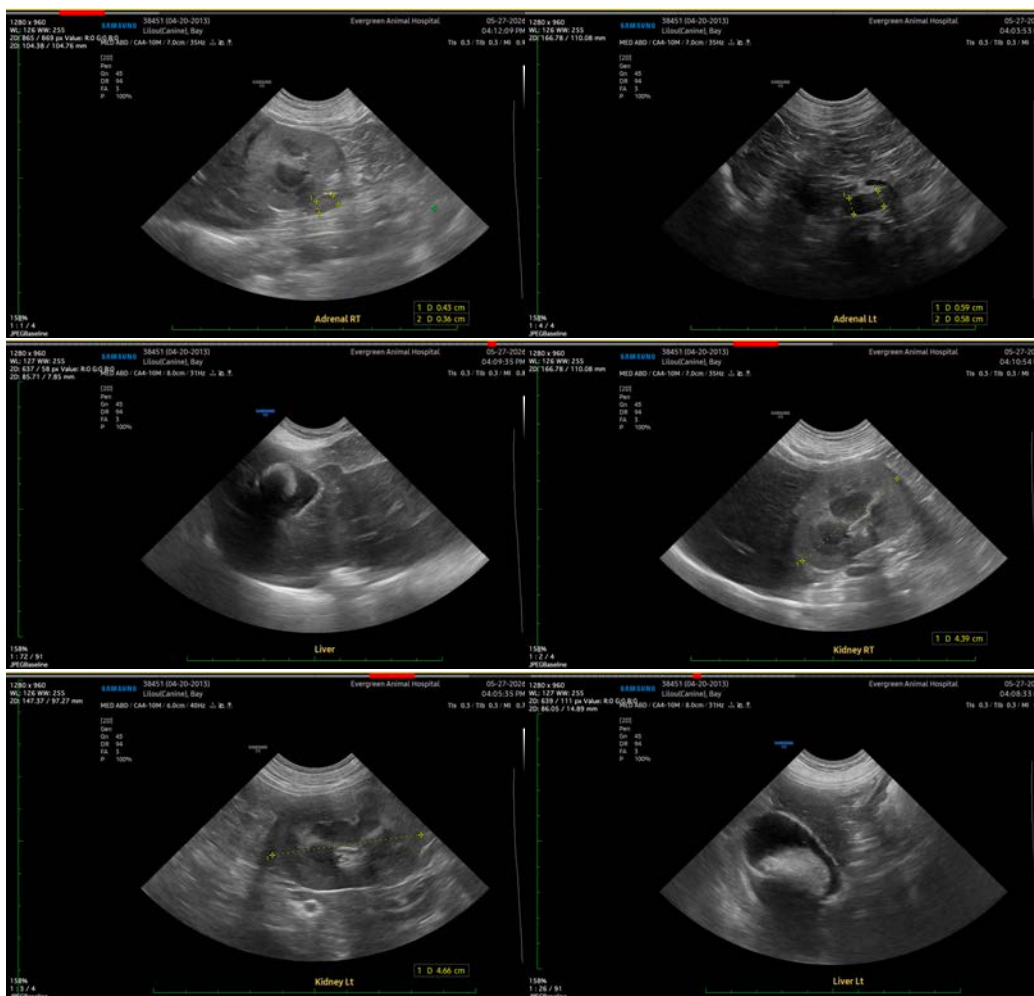
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The hepatobiliary changes described are likely at least in part contributing to patient's reportedly increased ALP, and empirical hepatic nutraceuticals including Ursodiol could be considered. Those changes are non-specific, however, and if unknown if any relation to the reported mobility concerns and/or changes in respiratory effort.

Therefore, further additional workup of those problems including potentially thoracic radiographs, consultation with a veterinary orthopedic surgeon and/or neurologist, potentially advanced imaging, etc. may be warranted.



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** info@sonopath.com