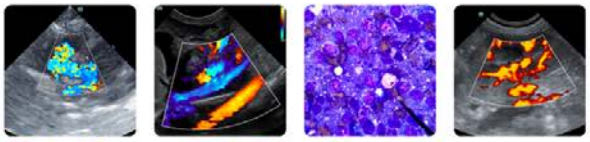




**PATIENT**

Jake Laub

**SPECIES**

Canine

**BREED**

Labrador Retriever

**SEX**

Spayed Female

**AGE**

7 Years 6 Months

**WEIGHT**

108

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Jessica Green

**HOSPITAL NAME**

Stanglein Veterinary Clinic

**REFERRING VET**

Dr. Daniel Hoffman

**INVOICE**

71955

**DATE**

11/19/25

## PRESENTING CLINICAL SIGNS

Jake (a FEMALE) presented on 11/14/2025 with a two-week history of hyporexia progressing to anorexia, lethargy, PU/PD, and vomiting - In-House BW was performed an significant liver enzyme elevations were noted; Pre-Operative BW with a PT/PTT was submitted to Antech, with the intention of performing FNA of the liver during the AUS Jake has a history of allergies and also had a severe, mixed otitis externa AU, as well as a suspected acral lick granuloma on the medial aspect of the RF carpal area

Abnormal PE/Chem/CBC/UA Results: 1. In-House CBC/Chemistry, performed 11/14/2025 -- CBC: no significant changes are appreciated; Chemistry: ALT > 2,000 U/L and ALKP = 515 U/L, but no other significant changes are appreciated 2. In-House Pancreatic-Specific Lipase, performed 11/14/2025 -- PSL = 44 U/L (WNL) 3. CBC/Chemistry and PT/PTT submitted to Antech 11/14/2025 -- CBC: no significant changes are appreciated; Chemistry: ALT = 1,978 U/L, ALKP = 406 U/L, and mild hyperglobulinemia (GLOB = 4.2 g/dL), but otherwise unremarkable; PT/PTT WNL

## 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 (6.82 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 (7.69 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 area of the right adrenal gland is examined without evident adrenal gland pathology but is difficult to fully visualize/isolate for measurement.

The left adrenal gland is normal in size (0.89 cm at cranial pole and 0.72 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

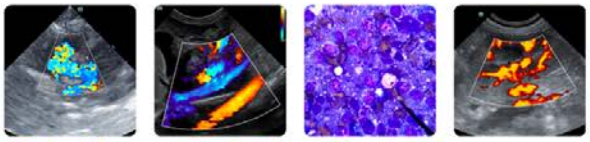
### *Spleen*

Spleen is subjectively large in size (2.7 cm thick) with normal smooth margins. Parenchyma is normal in echogenicity with a diffusely coarse/heterogenous echotexture. No discrete sizable focal nodules or masses are observed. Splenic vasculature appears normal.

### *Liver*

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is markedly heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.





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### *Gastrointestinal*

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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

- Non-specific hepatopathy – An obvious cause for the significant 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, etc. cannot be definitively ruled out.

- Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Bile acids are recommended if patient's total bilirubin is not increased.

Testing for Leptospirosis could be considered.

Ultimately, liver sampling is recommended. A fine needle aspirate could be considered if patient's coagulation status is appropriate to assess inflammatory cell type, rule in/out round cell neoplasia, etc. However, if a diagnosis is not obtained, ultimately a liver biopsy, being sure to include copper level assessment may be necessary for definitive diagnosis and therefore to further guide medical management.

Other than supportive/symptomatic medical management of clinical signs, further treatment recommendations are largely dependent on results of the above.

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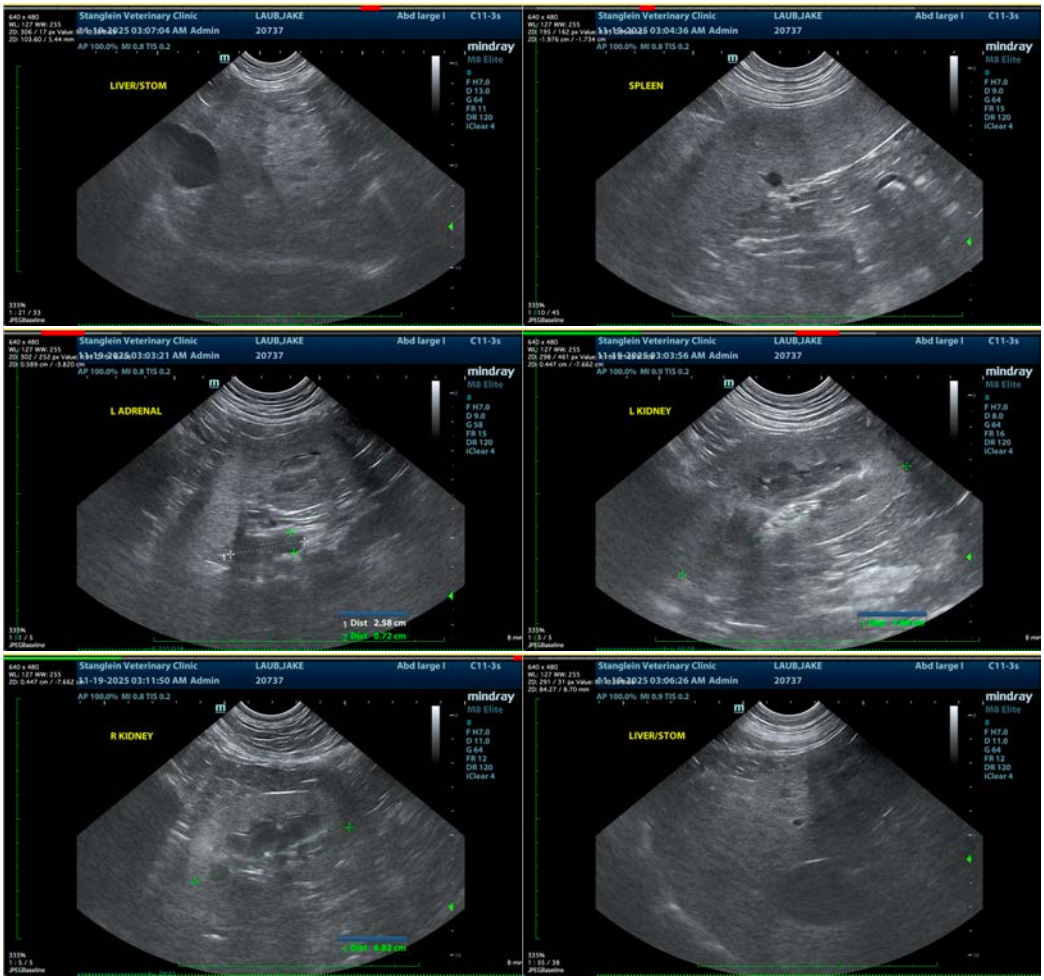


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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
info@sonopath.com