



PATIENT

Dean Armitage

SPECIES

Canine

BREED

Lab x

SEX

Neutered Male

AGE

5 Years

WEIGHT

21.2 kg

INTERPRETED BY

Beth Johnson, DVM
 DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Joshua Creek Animal
 Hospital

REFERRING VET

Dr. Al-kotobe

INVOICE

71597

DATE

11/5/25

PRESENTING CLINICAL SIGNS

P was sedated with Dexdom and Torb due to high anxiety in clinic. Hyporexia, occasional vomiting (twice in past two weeks), softer stools, PE was unremarkable, UTD on Lepto/Lyme/Rabies/DHPP/Bordatella Vaccines, history of recurrent pancreatitis. Has been on long term Clomicalm as well (40mg BID)

Abnormal PE/Chem/CBC/UA Results: AST 211(15-66)U/L ALT 1018(12-118)U/L ALP 270(5-131)U/L rest unremarkable.

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 prostate is unable to be well visualized in these images.

The right kidney is normal in size (5.7 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. A hyperechoic band parallel to the corticomedullary border is present.

The left kidney is normal in size (5.5 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. A hyperechoic band parallel to the corticomedullary border is present.

Adrenal Glands

The right adrenal gland is normal in size (0.95 cm at cranial pole and 0.39 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.54 cm at cranial pole and 0.46 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), except for two non-capsule disrupting, hypo- to anechoic nodules, which are noted near the head of the spleen, measuring between 0.60-0.70 cm in diameter. Splenic vasculature appears normal.

Liver

The liver is subjectively decreased/small in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.



PATIENT

Dean Armitage

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.

SPECIES

Canine

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.

BREED

Lab x

The visible small intestine demonstrates areas of mildly thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

SEX

Neutered Male

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

AGE

5 Years

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.

WEIGHT

21.2 kg

Free Abdomen

INTERPRETED BY

Beth Johnson, DVM
 DACVIM

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

There is no apparent pathologic lymphadenopathy noted in these images.

IMAGING PERFORMED BY

Crystal Hill

PRIMARY FINDINGS

- Mild/emerging inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
- 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. Vascular anomalies can't be ruled out.
- Subtle bilateral Medullary rim sign - This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.

HOSPITAL NAME

Joshua Creek Animal
 Hospital

REFERRING VET

Dr. Al-kotobe

INVOICE

71597

DATE

11/5/25



PATIENT

Dean Armitage

SPECIES

Canine

BREED

Lab x

SEX

Neutered Male

AGE

5 Years

WEIGHT

21.2 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Joshua Creek Animal
Hospital

REFERRING VET

Dr. Al-kotobe

INVOICE

71597

DATE

11/5/25

SECONDARY FINDINGS

- Hypo to anechoic splenic nodules – likely represents a benign lesion such as a cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given patient's reported liver enzyme changes, bile acids are recommended if patient's total bilirubin is not increased.

Testing for Leptospirosis could be considered.

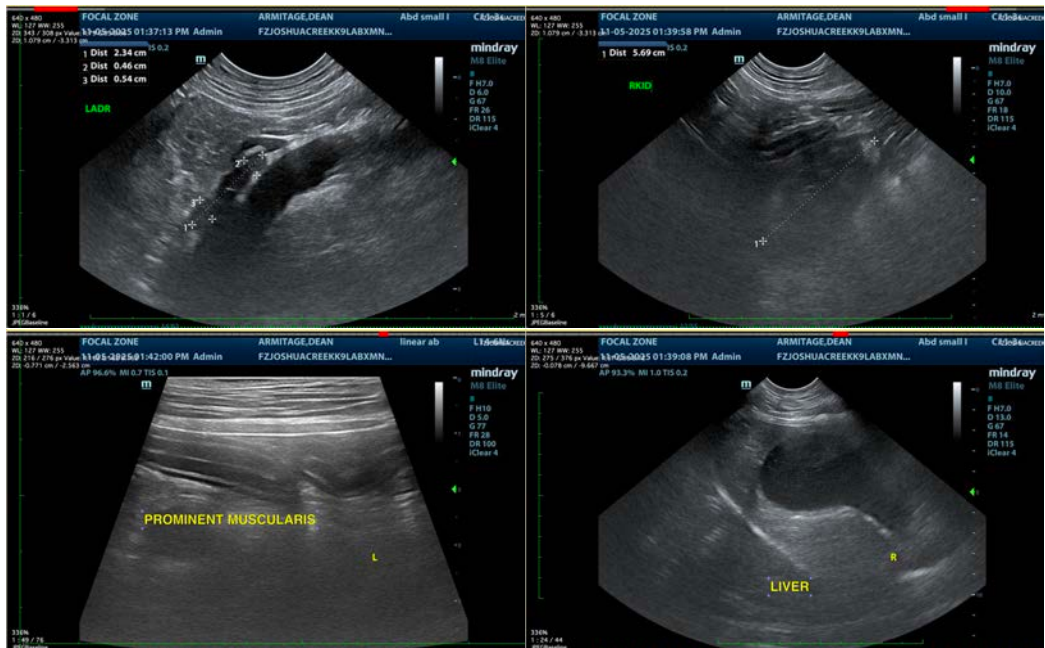
In the meantime, given concurrent gastrointestinal signs and bowel changes, a routine fecal/giardia exam is recommended.

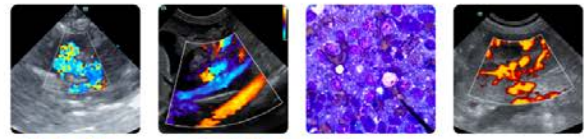
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease. Contact lab for recommendations on how long to discontinue antibiotics (if indicated) prior to obtaining a stool sample for submission.

Ultimately, tissue sampling including biopsies of the liver and GI tract may be necessary for a definitive diagnosis and therefore to further guide medical management.

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





PATIENT

Dean Armitage

SPECIES

Canine

BREED

Lab x

SEX

Neutered Male

AGE

5 Years

WEIGHT

21.2 kg

INTERPRETED BY

Beth Johnson, DVM
 DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Joshua Creek Animal
 Hospital

REFERRING VET

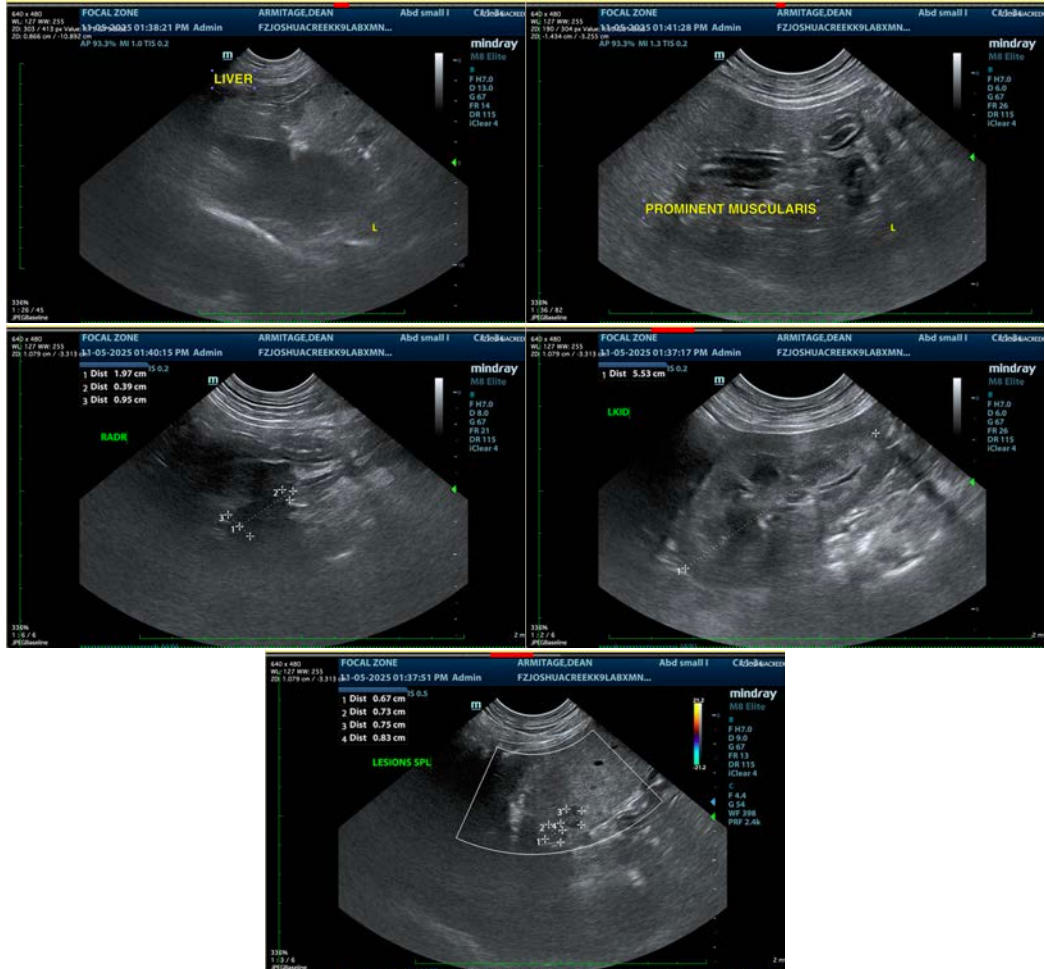
Dr. Al-kotobe

INVOICE

71597

DATE

11/5/25



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