

**DATE**

11/21/22

PRESENTING CLINICAL SIGNS

History: Spring 2022 focal vaccine site reaction - Influenza vaccine. Resolved.

PATIENT

Bouldin Genau

Sept 2022 painful jaw/ unable to open mouth >> masticatory myositis. Started pred. Doing well until 11/2/22 - Bloody diarrhea/ HGE, responded to treatment (metronidazole/ diigel / bland diet). Diarrhea / bloody diarrhea again within 48 hours of metro and proviable treatments stopping. 11/18 >> hospitalized for fluid and GI support. ALT mild elevation 353 11/2, now > 500 11/18.

SPECIES

Canine

Current Medications: Currently in middle of pred taper 35 mg po sid.

Starting 11/18 IV fluids, Metronidazole 500 mg IV BID. Cerenia 35 mg IV SID, Pantoprazole 35 mg IV SID. Bland diet. Provable.

BREED

Labrador Retriever

Lab Results: ALT on the rise 300's 11/2>> 500's 11/18.

Radiographs: Enlarged liver, Irregular gas fluid interface majority of small intestines, no mass effect or foreign body or obstruction.

SEX

Neutered Male

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

AGE

2/28/20

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**WEIGHT**

77 Pounds

Urinary System

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.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

INTERPRETED BYBeth Johnson, DVM
DACVIM

Left kidney is normal is size (7.65 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.

HOSPITAL NAME

Eastern AH

Right kidney is normal is size (6.31 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.

REFERRING VET

Dr. Warner-Jones

Adrenal Glands

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 2.96 cm long x 0.49 cm at cranial pole and 0.52 cm at caudal pole. The right adrenal gland measures 1.27 cm long x 0.43 cm at cranial pole and 0.59 cm at caudal pole.

INVOICE

18179

Spleen

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) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than

normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

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.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The stomach is moderately distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. However, given the reported history of fasting, delayed gastric emptying could be considered. Soft (cloth) fluid absorbing foreign material is considered less likely but cannot be definitively ruled out. If clinical signs are consistent (vomiting, etc.), recommendations include supportive medical care, 24 hours fasting and re-image.

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 and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas 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 evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Hyperechoic hepatomegaly – This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.

Secondary Findings

- Flat adrenal glands as expected with reported steroid therapy

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

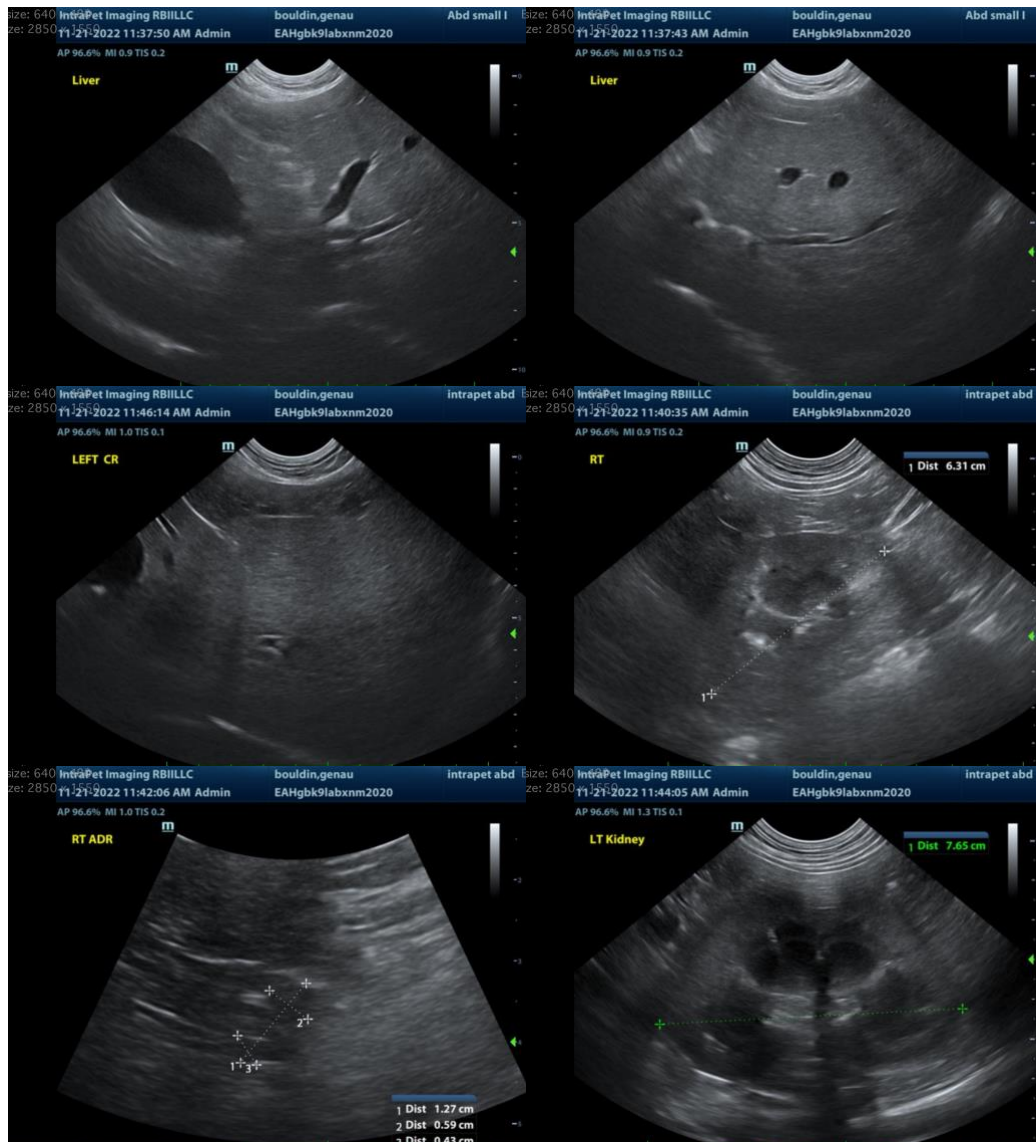
Given this patient's recurrent hemorrhagic diarrhea, a fecal exam is recommended if not recently evaluated, as is a fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

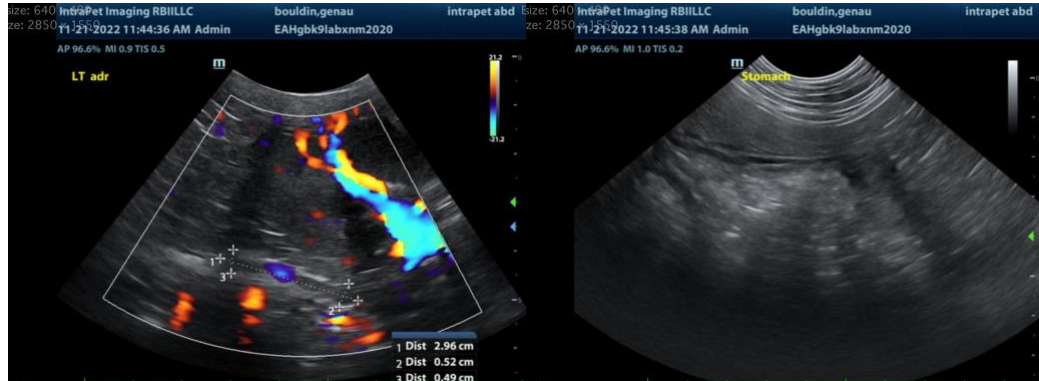
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

The reported ALT increase could be secondary to a steroid hepatopathy, however, given the progression,

other differentials include potentially an infectious disease that may be secondary to immunosuppression from the steroids versus other, therefore, diagnostic considerations could include testing for Leptospirosis, as well as a fine needle aspirate of the liver if patients coagulation status is appropriate. Alternatively, the reportedly in place steroid taper could be continued with recheck ALT after completion.

In the meantime, empirical deworming with a 5-day course of Panacur is recommended, as is a probiotic such as Visbiome or Provable and transition to an alternative diet based on trial-and-error/patient response, beginning with a fiber response colitis diet or a hydrolyzed protein diet, etc.





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.

Beth Johnson, DVM DACVIM
Beth.Johnson@SonoPath.com