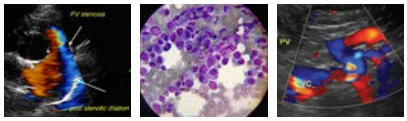
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

7/20/23

PATIENT

Hugo Krimsky

SPECIES

Canine

BREED

Greater Swiss Mtn Dog

SEX

Neutered Male

AGE

7/19/12

WEIGHT

102.5 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Ruby

INVOICE

44206

PRESENTING CLINICAL SIGNS

Vomited @6am a small amount of his kibble and bile. Hx of stomach issues. Did not want to eat breakfast. Did not want to eat dinner. Around 8 pm noticed his breathing was more labored and then not wanting to get up and walk. When he finally got up was wobbly and the breathing rapidly continued. Minimally responsive with the owner. Owner recalls that he has urinated on the floor a couple of times which is out of his character. And did have a history of an elevated LE.

Current Medications: Unasyn, Buprenorphine, Ondansetron.
Lab Results: See attached.
Radiographs: NSF chest and abdomen.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately 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.

The right kidney is normal in size (7.85 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 in size (8.0 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 (1.0 cm at the cranial pole and 0.91 cm at the caudal pole), shape and contour. A hyperechoic nodule is noted in the cranial pole. Nodule does not disrupt normal shape and/or architecture. Visible surrounding vasculature appears normal.

The adrenal gland is enlarged (1.7 cm at the cranial pole and 2.4 cm at the caudal pole) with mild heterogenous parenchymal changes. Swollen capsular expansion is noted without evident capsular escape. There is no definitively visible vascular invasion able to be confirmed, but partial or emerging phrenicoabdominal invasion can't be definitively ruled out.

Spleen

Spleen is subjectively large 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). Multifocal well demarcated, hyperechoic homogeneous nodules were noted throughout the parenchyma. Splenic vasculature appears normal. The spleen is folded upon itself, which is a positional non-pathologic variant.

Liver
Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses 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. The wall is smooth without visible thickening. 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, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen
There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- Left adrenal mass with a more normal appearing right adrenal gland size – This could be an incidental finding or normal patient variant. However, pheochromocytoma, adenoma, or even adenocarcinoma cannot be ruled out, especially given the concern for possible early or emerging phrenicoabdominal invasion. This finding should be interpreted in combination with clinical signs of hyperadrenocorticism, other adrenal disease, and/or other additional testing.

- Hypoechoic hepatomegaly – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.

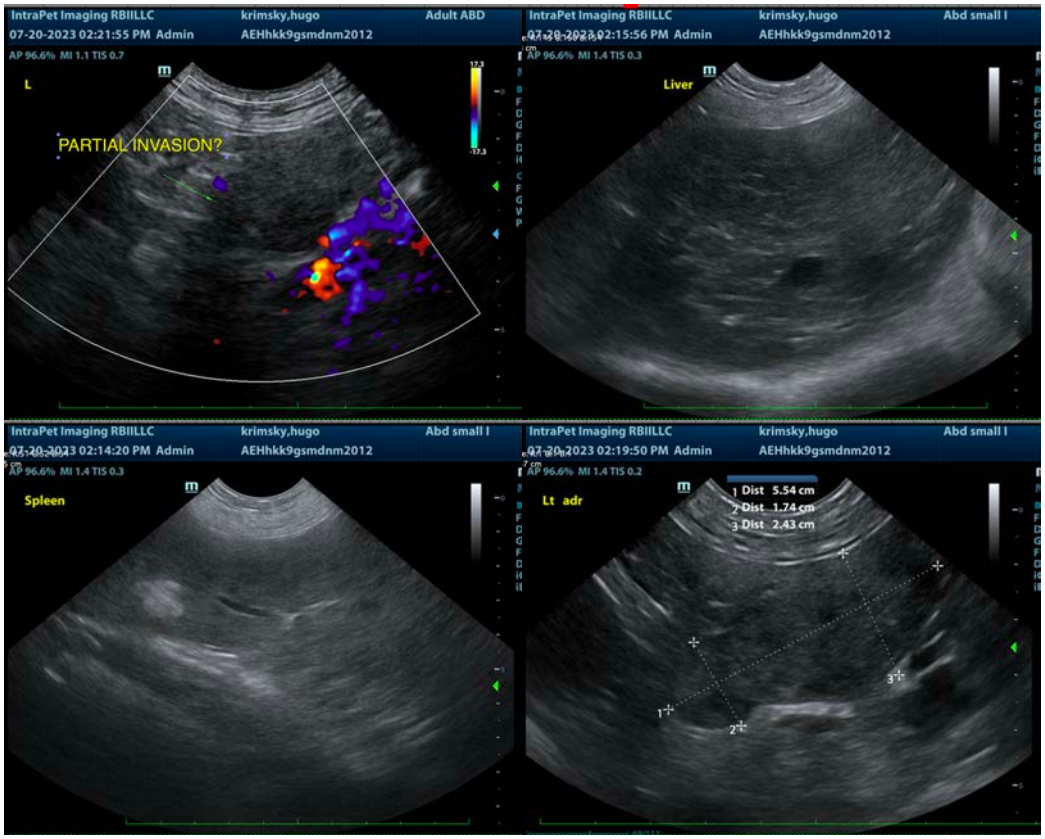
- Moderate gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

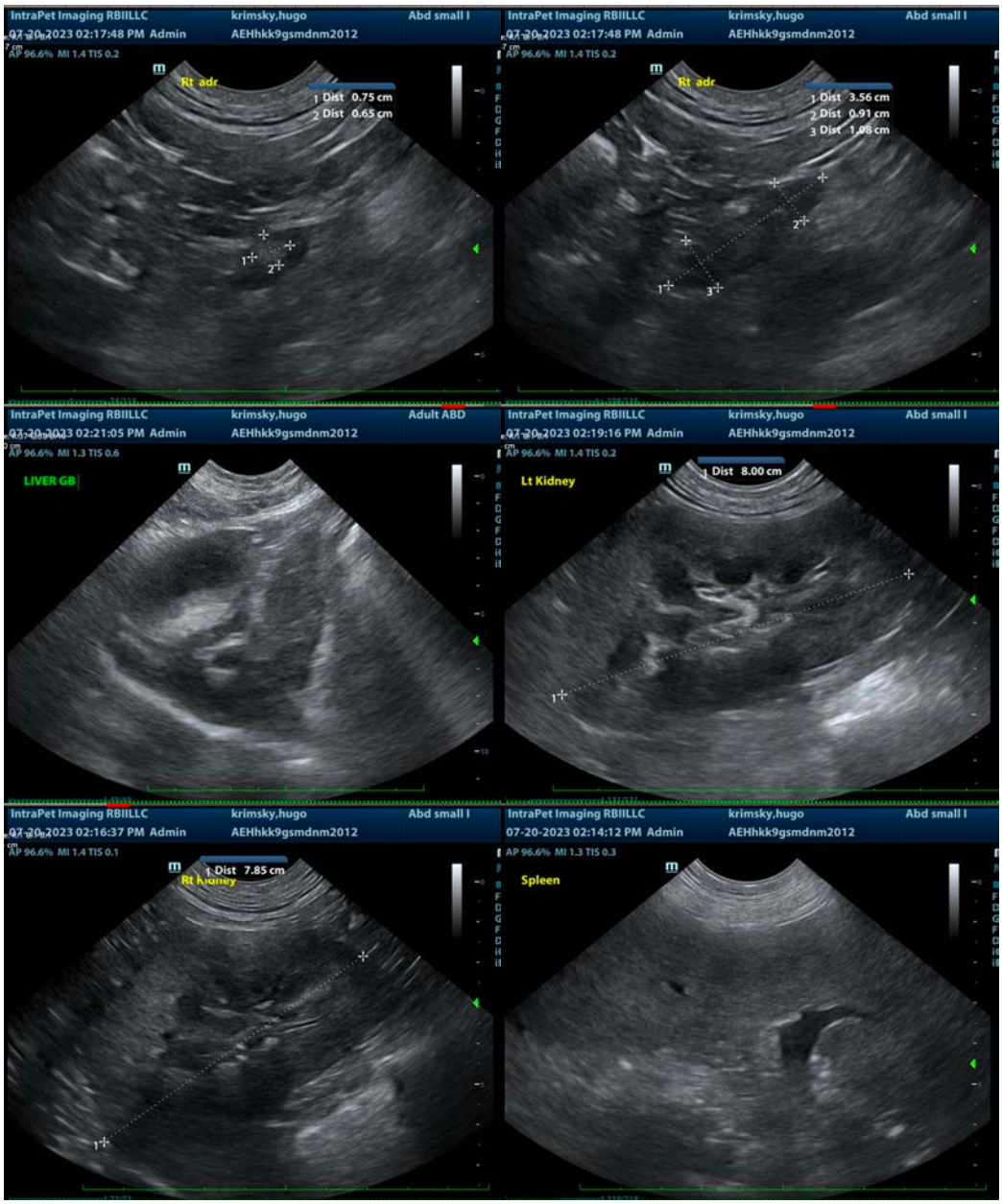
- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

As is reportedly already planned, a blood pressure is recommended, followed potentially by adrenal hormone testing, beginning with a low-dose Dexamethasone suppression test and/or potentially urine catecholamines if possible.

Additionally, a fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate. Ultimately, further imaging including an abdominal contrast CT scan could be considered for further evaluation of the left adrenal mass and vessels surrounding it.





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
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