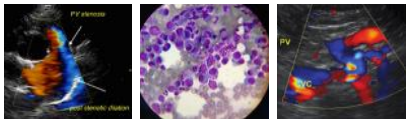
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE
11/21/22

PATIENT
Tennie Bean Standard

SPECIES
Canine

BREED
Boston Terrier

SEX
Spayed Female

AGE
5/1/10

WEIGHT
18.4 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Jacksonville VH

REFERRING VET
Dr. Kablis

INVOICE
18171

PRESENTING CLINICAL SIGNS

History: Past couple of weeks not eating well. Has been losing weight. Coughing. 4-5/6 Systolic murmur. Generalized muscle atrophy. Reactive on tracheal palpation

Current Medications: 11/14/22: Doxycycline 50mg BID, Cerenia 0.85ml SQ
Lab Results: ALK Phos 540, WBC 17.0, Neut 14790, Toxic change- dohle bodies, HCT 30%, Reticulocytes 62400
Radiographs: Chest Rads- generalized cardiomegaly, no pulmonary edema/pleural effusion; cranial aspect abdomen (liver, spleen) questionable for mass? other?
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

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.

Left kidney is normal is size (4.57 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.

Right kidney is normal is size (4.79 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

Left adrenal gland is normal in size (2.13 cm long x 0.66 cm at cranial pole and 0.58 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.83 cm long x 0.76 cm at cranial pole and 0.56 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with normal smooth margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. An approximately 4.0 cm in diameter, primarily solid, heterogenous primarily isoechoic mass was present, resulting in a capsular bulge near the tail of the spleen. Splenic vasculature appears normal.

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 subjectively hyperechoic in appearance. The common bile duct is tortuous and dilated, measuring 0.77 cm dilated.

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

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. 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.

Other

No evidence of pericardial effusion or heart base tumors in these images at this time.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Pancreatic age-related remodeling – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.

- The diffuse splenic changes 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. The focal mass is more concerning for infiltrative neoplasia such as round cell neoplasia versus sarcoma versus other. Benign nodular hyperplasia, extramedullary hematopoiesis, etc., however, can mimic neoplasia and cannot be differentiated without tissue sampling.

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

Secondary Findings

- 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. Given the concurrent common

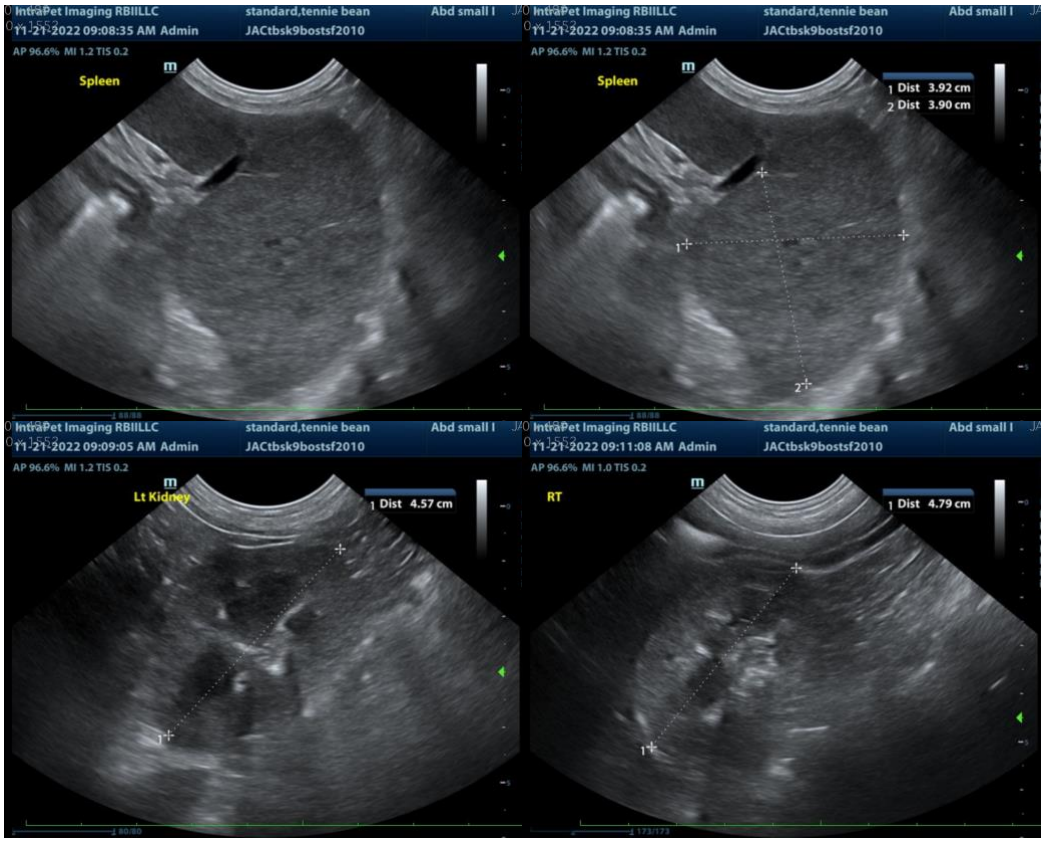
bile duct dilation and liver pathology, chronic cholangitis/cholangiohepatitis or potentially a residual changes secondary to resolved cholangiohepatitis or potentially chronic pancreatitis are considered likely. Secondary infiltrative disease, including infiltrative neoplasia cannot be definitively ruled out.

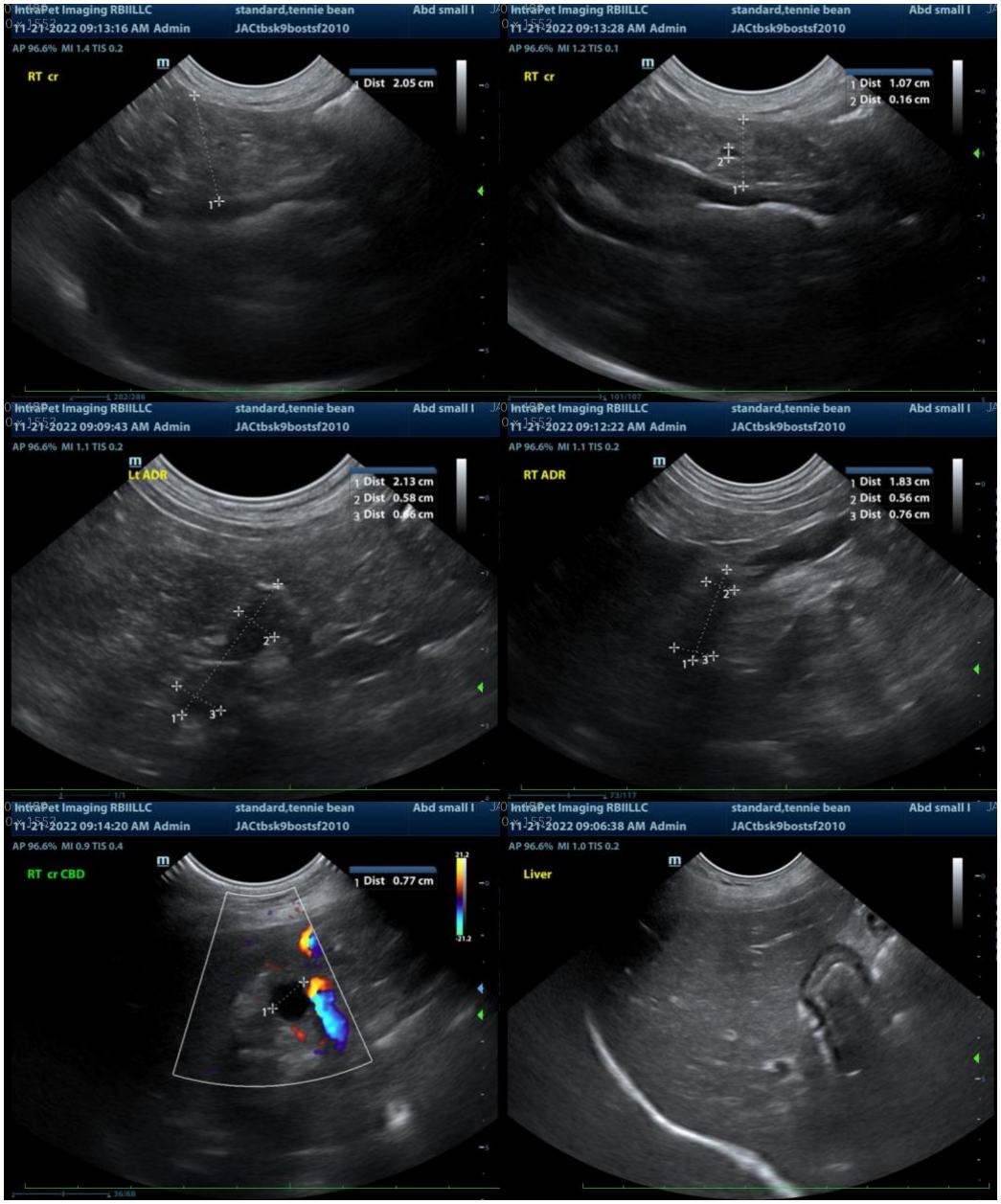
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

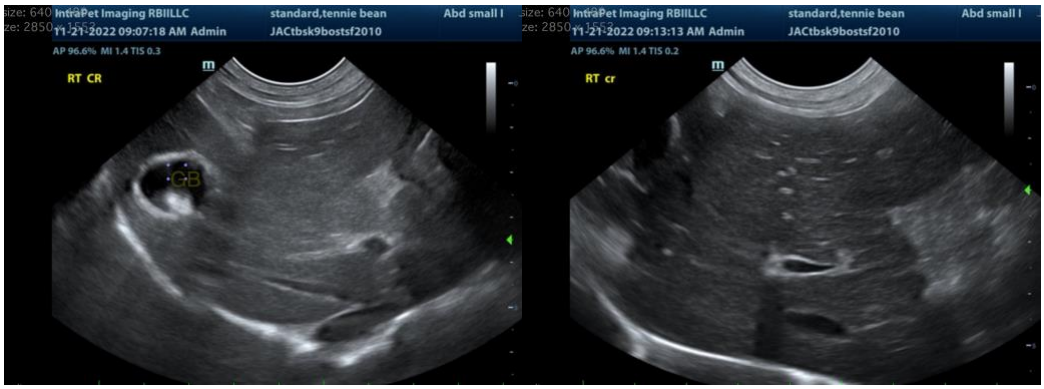
Given this patients reported cough and cardiomegaly, an echocardiogram could be considered if not already evaluated.

Given the abdominal pathology described above, a fine needle aspirate of the splenic mass, as well as the liver are recommended if patients coagulation status is appropriate.

In the meantime, empirical hepatic nutraceuticals +/- broad spectrum antibiotics could be considered.




IntraPet Imaging RBIILLC
standard,tennie bean
Abd small I
11-21-2022 09:13:16 AM Admin
JACtbsk9bostsf2010
AP 96.6% MI 1.4 TIS 0.2
RT cr
1 Dist 2.05 cm
IntraPet Imaging RBIILLC
standard,tennie bean
Abd small I
11-21-2022 09:13:28 AM Admin
JACtbsk9bostsf2010
AP 96.6% MI 1.2 TIS 0.1
RT cr
1 Dist 1.07 cm
2 Dist 0.16 cm
IntraPet Imaging RBIILLC
standard,tennie bean
Abd small I
11-21-2022 09:09:43 AM Admin
JACtbsk9bostsf2010
AP 96.6% MI 1.1 TIS 0.2
Lt ADR
1 Dist 2.13 cm
2 Dist 0.58 cm
3 Dist 0.96 cm
IntraPet Imaging RBIILLC
standard,tennie bean
Abd small I
11-21-2022 09:12:22 AM Admin
JACtbsk9bostsf2010
AP 96.6% MI 1.1 TIS 0.2
RT ADR
1 Dist 1.83 cm
2 Dist 0.56 cm
3 Dist 0.76 cm
IntraPet Imaging RBIILLC
standard,tennie bean
Abd small I
11-21-2022 09:14:20 AM Admin
JACtbsk9bostsf2010
AP 96.6% MI 0.9 TIS 0.4
RT cr CBD
1 Dist 0.77 cm
IntraPet Imaging RBIILLC
standard,tennie bean
Abd small I
11-21-2022 09:06:38 AM Admin
JACtbsk9bostsf2010
AP 96.6% MI 1.0 TIS 0.2
Liver



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