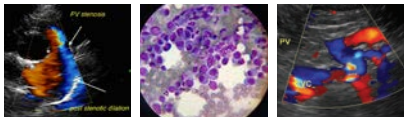
IMAGING PERFORMED BY

IntraPet.com



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

DATE

11/30/22

PATIENT

Berklee Aigner

SPECIES

Canine

BREED

Labrador

SEX

Spayed Female

AGE

7/10/11

WEIGHT

67.4 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Northwind AH

REFERRING VET

Dr. Miller

INVOICE

43066

PRESENTING CLINICAL SIGNS

Constipation, weight loss, PU/PD.

Current Medications: None.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is diffusely thick, hyperechoic, and irregular. Contents are primarily anechoic. There is a heterogeneous, vascular, irregular proximal urethral mass that extends into the trigone of the urinary bladder.

The right kidney is normal in size (7.01 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 (7.42 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 mineral or infarcts observed. Pyelectasia noted measuring 0.78 cm in the transverse view.

Adrenal Glands

The right adrenal gland is normal in size (2.46 cm long x 0.84 cm at the cranial pole and 0.71 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.78 cm long x 0.58 cm at the cranial pole and 0.49 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. 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). The head of the spleen contains a well demarcated hypo- to anechoic area measuring approximately 2.5 cm in diameter with poor vascularity. Infarct versus nodule/mass is difficult to differentiate. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. 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 stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) 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 (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.

Sublumbar lymphadenopathy is present, characterized by large hypoechoic sublumbar lymph nodes measuring almost 2.0 cm thick x 4.5 cm long. Surrounding the enlarged sublumbar lymph nodes there is markedly enhanced hyperechoic fat.

Additionally, hypoechoic round lesions are also present in images labeled “caudal subq” and presumed to be lymph nodes as well.

There is no evidence of pericardial effusion or heart base pathology noted in these images at this time.

PRIMARY FINDINGS

- **Proximal urethral mass** – Most concerning for infiltrative neoplasia such as transitional cell carcinoma versus other with extension into the urinary bladder trigone with surrounding lymphadenopathy and inflammatory changes. A benign process cannot be ruled out but is considered much less likely.

- **Aggressive sublumbar and inguinal lymph nodes –** most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

- **Pyelectasia in the left kidney –** concerning for obstruction caused by the infiltrative trigone pathology. However, concurrent infection/pyelonephritis cannot be ruled out.

- **Heterogenous Liver –** These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

- The splenic lesion described above could represent incidental infarct or a hypo- to anechoic splenic nodule/mass and is difficult to differentiate in these images at this time.

SECONDARY FINDINGS

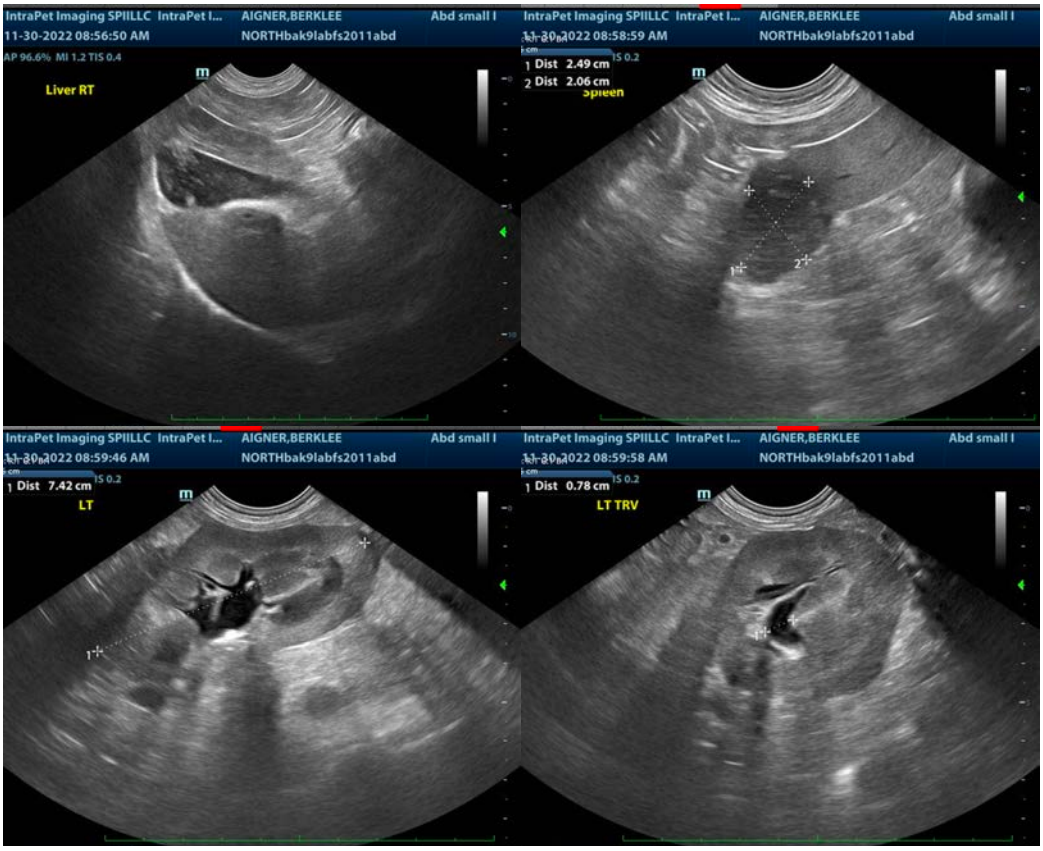
- **Gallbladder debris -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted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

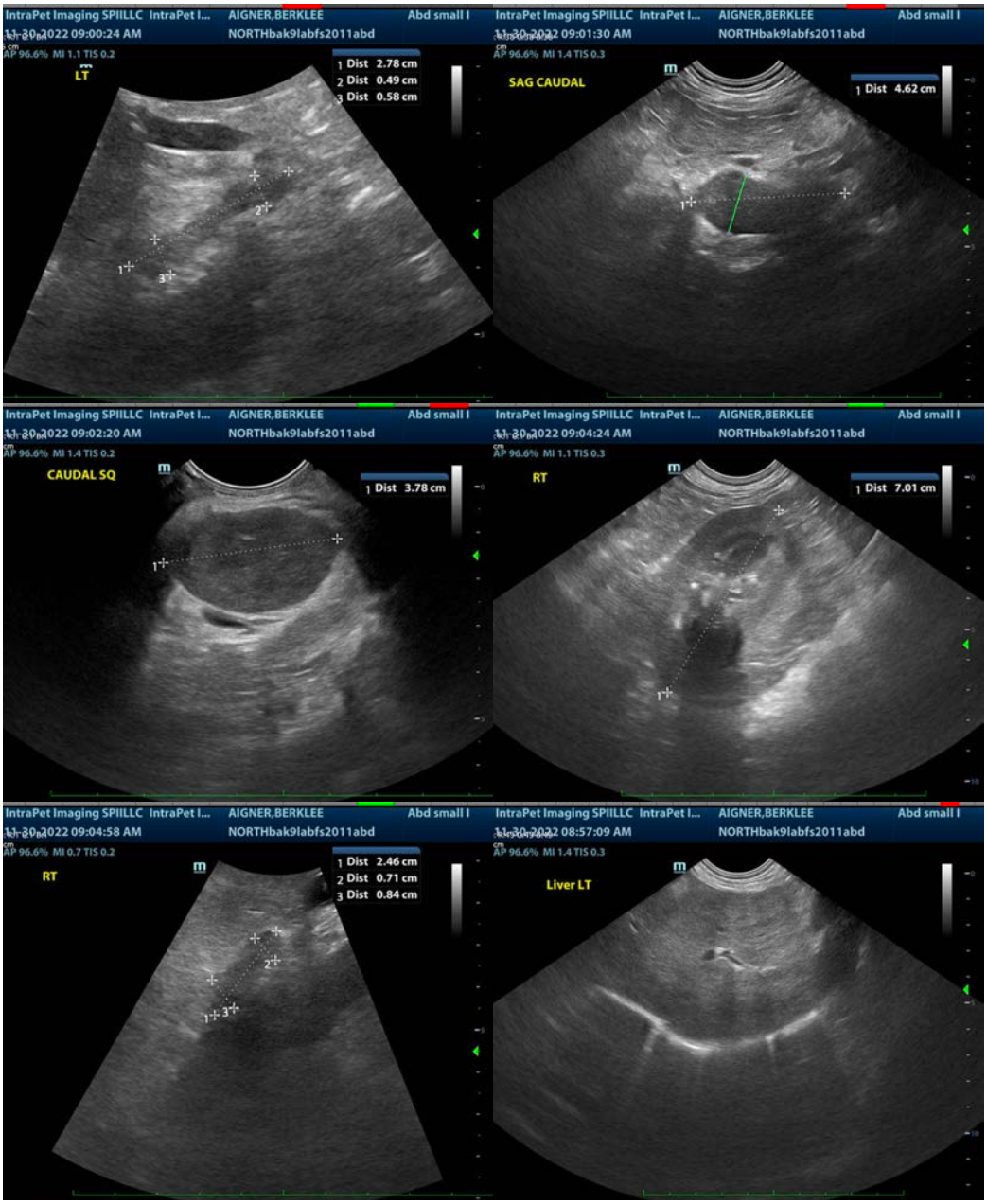
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

Urinalysis and urine culture, if indicated based on urinalysis results, are recommended. Submission of urine to look for BRAF gene mutation, which is associated with urinary bladder cancer, could be considered. Other diagnostic options include traumatic catheterization, fine needle aspirate (with small risk of tumor seeding/trailing) or cystoscopy for further sampling. Alternatively, a fine needle aspirate of the enlarged lymph nodes could be considered if patient's coagulation status is appropriate.

While both the liver and splenic changes trend toward benign in appearance, given the evidence of metastatic disease suggested by the aggressive lymphadenopathy, fine needle aspirates of both the liver and spleen are also recommended if patient's coagulation status is appropriate for further evaluation of metastatic disease.




IntraPet Imaging SPIILLC IntraPet I... AIGNER,BERKLEE Abd small I
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LT
1 Dist 2.78 cm
2 Dist 0.49 cm
3 Dist 0.58 cm
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SAG CAUDAL
1 Dist 4.62 cm
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CAUDAL SQ
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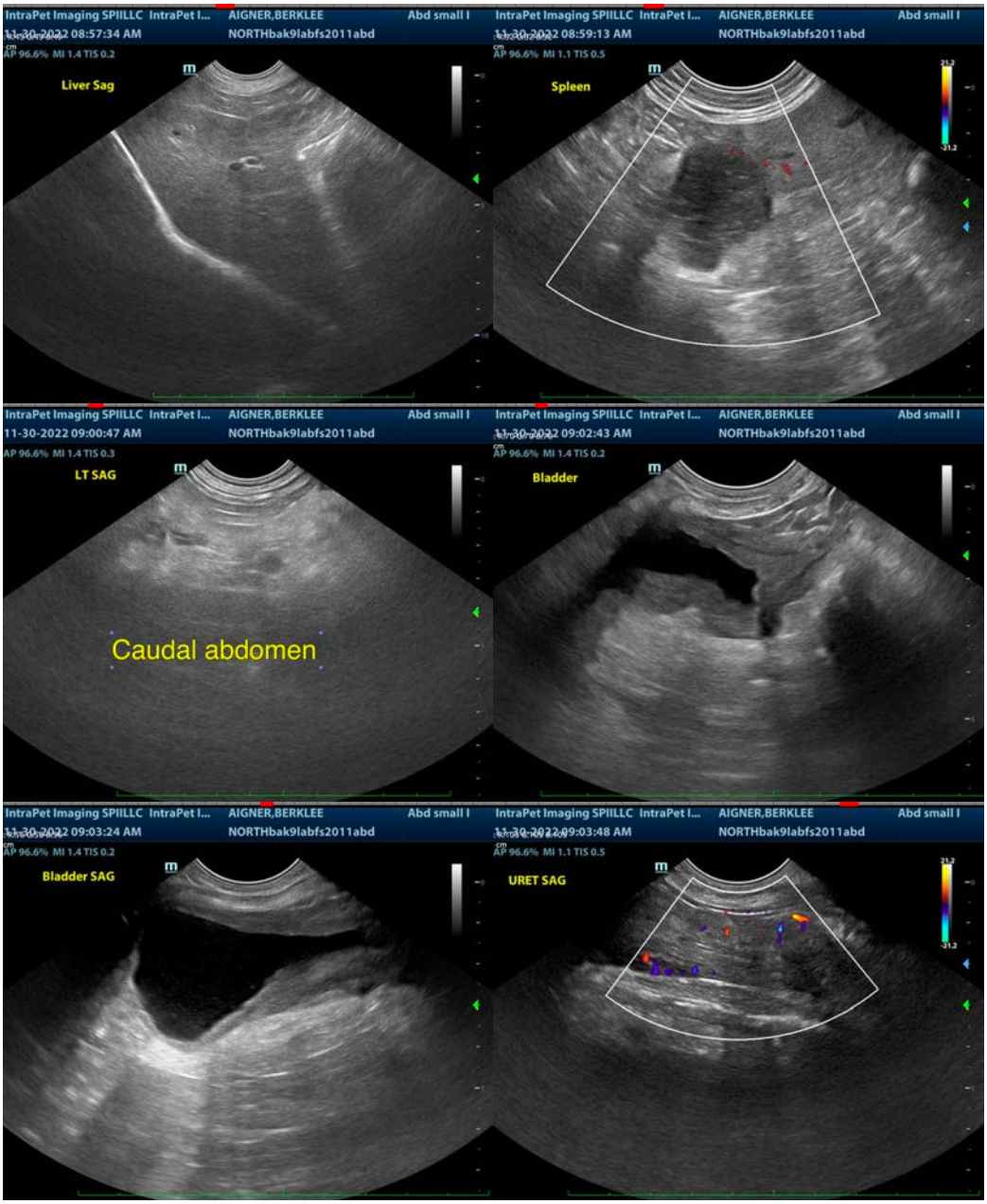
Liver LT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AP 96.6% MI 1.4 TIS 0.2
Liver Sag
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11-30-2022 08:59:13 AM NORTHbak9labfs2011abd
AP 96.6% MI 1.1 TIS 0.5
Spleen
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AP 96.6% MI 1.4 TIS 0.3
LT SAG
Caudal abdomen
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Bladder
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Bladder SAG
IntraPet Imaging SPIILLC IntraPet I... AIGNER,BERKLEE Abd small I
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AP 96.6% MI 1.1 TIS 0.5
URET SAG

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.

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