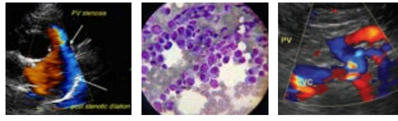


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

4/13/23

PATIENT

Liam Bowen

SPECIES

Canine

BREED

German Shorthair Pointer

SEX

Neutered Male

AGE

4/12/14

WEIGHT

66.7 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Kalwa

INVOICE

46651

PRESENTING CLINICAL SIGNS

Referral from Rock Spring - 9 yr MN GSH Pointer - PC: Increased urination - Splenic tumor on fast scan - Chest clear - Monday: 51% PCV, PLT 279k, WBC wnl - Concern for liver - Wanted to refer for possible ultrasound, +- Splenectomy, +- liver FNA/ Biopsy (would need PT/PTT first). ATO in room: - Clinical signs started < 2 weeks ago of increased urination and inappropriate urination in house- O made chart of this - Went to Dr. Gibson on Monday this week, FAST scanned, worried about tumor - Eating, drinking, urinating, defecating, energetic, no lethargy - O shocked- seems ok - No weight loss, no muscle loss - Normally 70 lbs - Medical hx: None- neutered, rescue, unsure age when rescued. - Loves people food- O kennels him when they eat - O states that the urinary issue has dissipated - O takes him outside every 3 hours.

Current Medications: None listed.
Lab Results: See attached.
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 urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (6.75 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (7.16 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.75 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.70 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a large mixed echogenic intraparenchymal mass lesion visualized measuring 5.13 cm x 3.92 cm.

Liver
The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas
The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a significant lymphadenopathy present at the mesenteric root with large, hypoechoic, rounded mesenteric lymph node measuring 2.5 cm and 2.2 cm in diameter. The omentum is hyperechoic around the mesenteric lymph nodes.

Other
The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

No pleural effusion or thoracic mass lesions are observed.

There is an isoechoic large mass lesion visualized in the right caudal abdomen measuring 10.08 cm x 5.16 cm, most consistent with an intraabdominal lipoma.

ULTRASONOGRAPHIC FINDINGS

- Large, mixed echogenic intraparenchymal splenic mass – Differentials include: benign lesions (lymphoid hyperplasia, hemangioma etc..) or cancerous lesions (hemangiosarcoma, lymphoma, histiocytic sarcoma etc..)

- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

- Significant lymphadenopathy at the mesenteric root – The moderate mesenteric lymphadenopathy could be concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease(tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

- Isoechoic mass effect in the right caudal abdomen – Suspect intraabdominal lipoma. Recommend a fine needle aspirate.

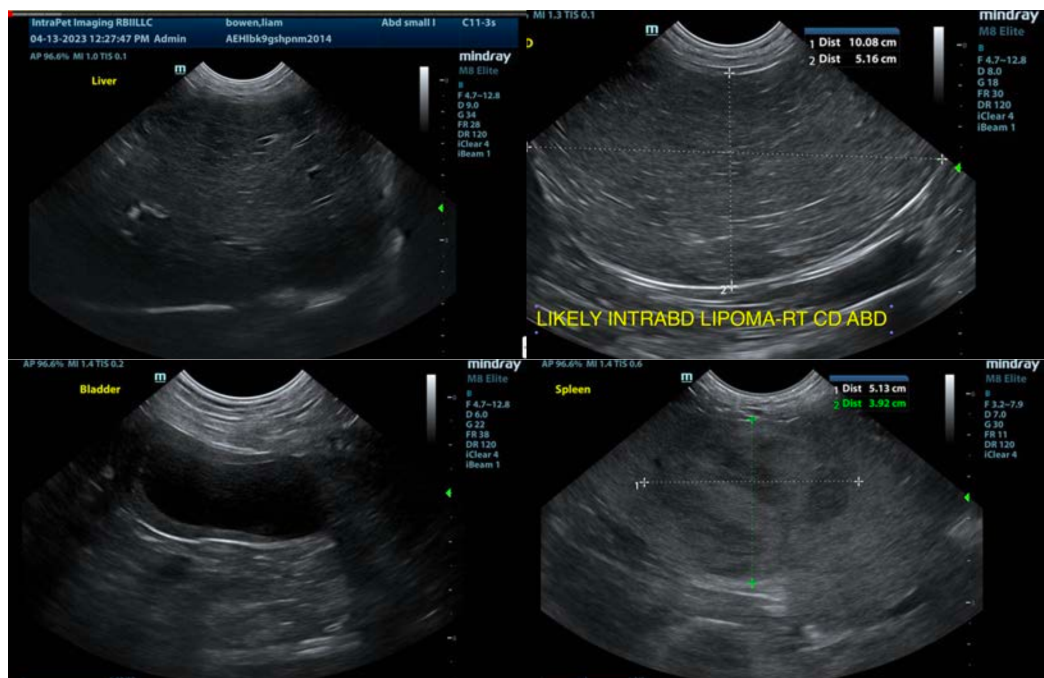
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

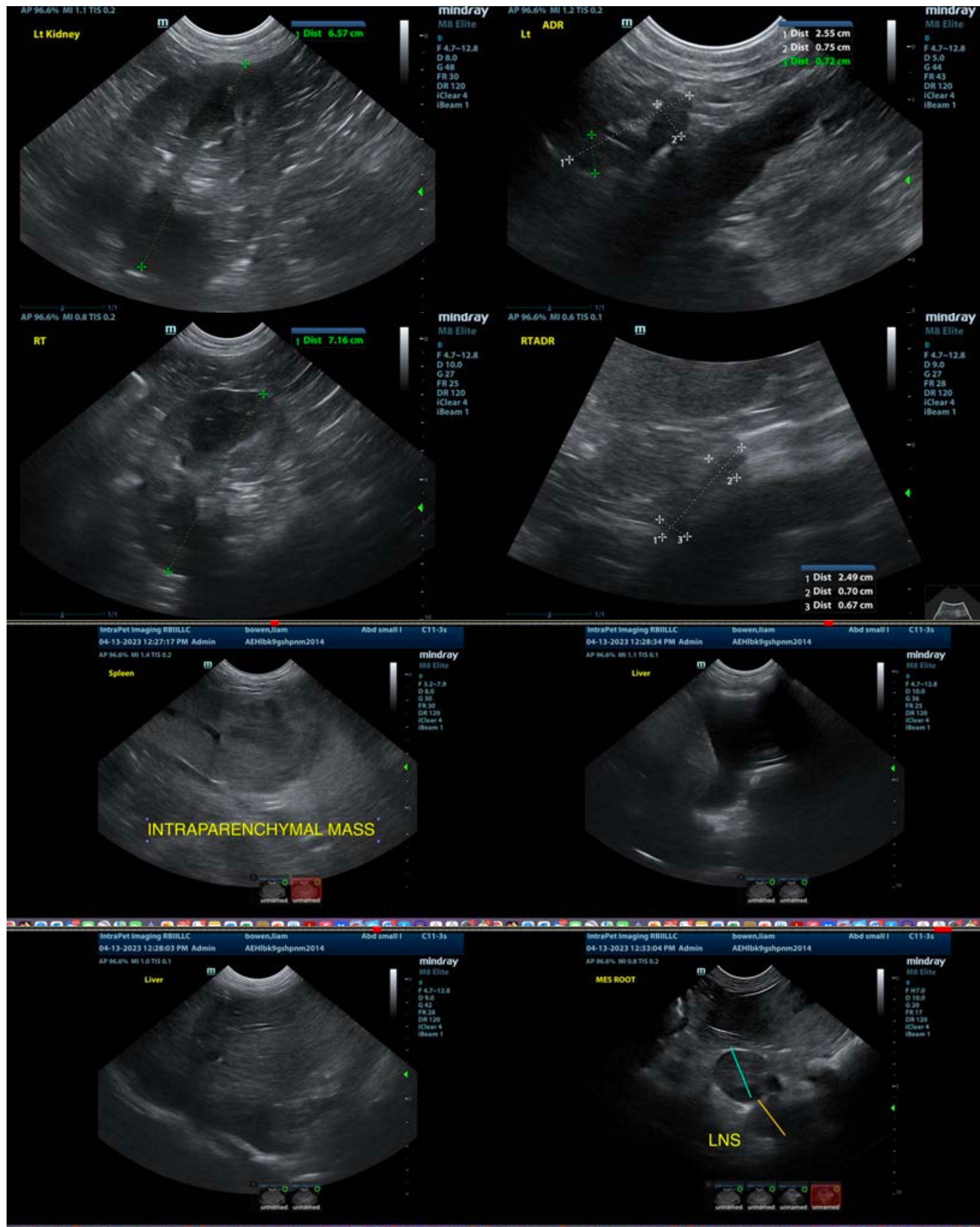
There is a mixed echogenic mass effect associated with the spleen. It is somewhat abnormal in that it appears primarily intraparenchymal. Nonetheless, this is concerning, particularly because the lymph nodes at the mesenteric root are significantly increased in size. Recommend a fine needle aspirate of the splenic lesion and a lymph node at the mesenteric root if a safe window can be visualized. The changes observed with the liver are non-specific and questionable, given the normal liver enzymes reported.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

If a cytologic diagnosis cannot be obtained, consider surgical splenectomy for both diagnostic and therapeutic purposes with a biopsy of the mesenteric lymph nodes at the same time. A significant concern is the possibility of metastatic neoplasia.

If surgery is pursued to further evaluate the splenic mass lesion and cytology confirms an intraabdominal lipoma, surgical removal could be considered.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com