**DATE PRESENTING CLINICAL SIGNS**

8/14/23

Patient was presented for weight loss and lethargy. Routine CBC/Chemistry was done in house and routine abdominal x-rays were taken. Radiograph confirmed cranial abdominal mass effect. Bloodwork indicated anemia and mature leukocytosis. Abdominal ultrasound was recommended to confirm the diagnosis.

PATIENT

Sam Dupont

Current Medications: None listed.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

SPECIES

Canine

BREED

Lhasa Apso

SEX

Neutered Male

AGE

10/13/06

WEIGHT

9.8 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Bethany Centennial

REFERRING VET

Dr. Shah

INVOICE

44715

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 (4.32 cm) with mild pyelectasia at 0.25 cm. Overall echogenicity is slightly hyperechoic with poor 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 (4.18 cm). Overall echogenicity is slightly hyperechoic with poor 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 0.54 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 0.56 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 small hypoechoic nodule visualized within the parenchyma measuring 0.41 cm. *See notes under liver.

Liver

The liver is large in size and irregular in shape. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. The left side of the liver is irregular, creating a mass effect measuring at least 5.13 cm x 5.65 cm. This mass is solid and

mixed echogenicity with some hypo- and hyperechoic regions as well as intraparenchymal nodules. A section of this mass lesion can be visualized caudal to the stomach, causing concern that a portion of this lesion could be arising from the spleen, but no attachment to the spleen can be clearly visualized.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. 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. Jejunum wall measures 0.32 cm. 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 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

PRIMARY FINDINGS

- Small, hypoechoic splenic nodule – There is a non-cavitated, hypoechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Large, irregular, heterogeneous liver with a left-sided mixed echogenicity mass effect – 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. The appearance of the large mass effect is most consistent with a primary hepatic mass (adenoma, carcinoma, other), although other differentials are possible. Additionally, an association with the spleen cannot be definitively ruled out.

SECONDARY FINDINGS

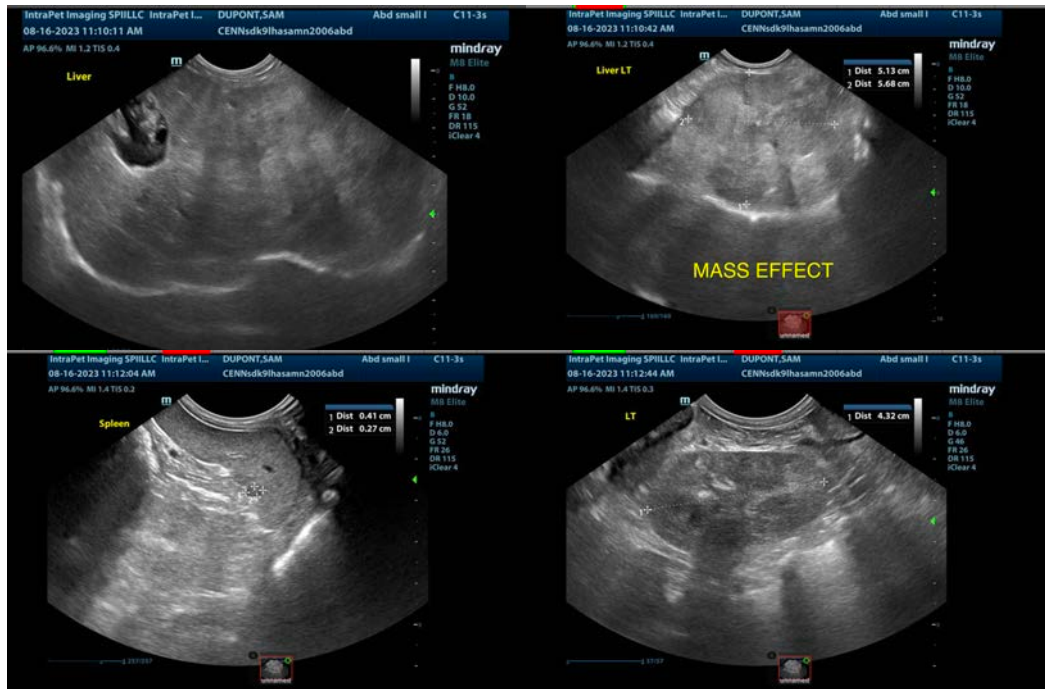
- Decreased corticomedullary distinction in both kidneys with mild left-sided pyelectasia – The bilateral renal findings are consistent with age-related change.

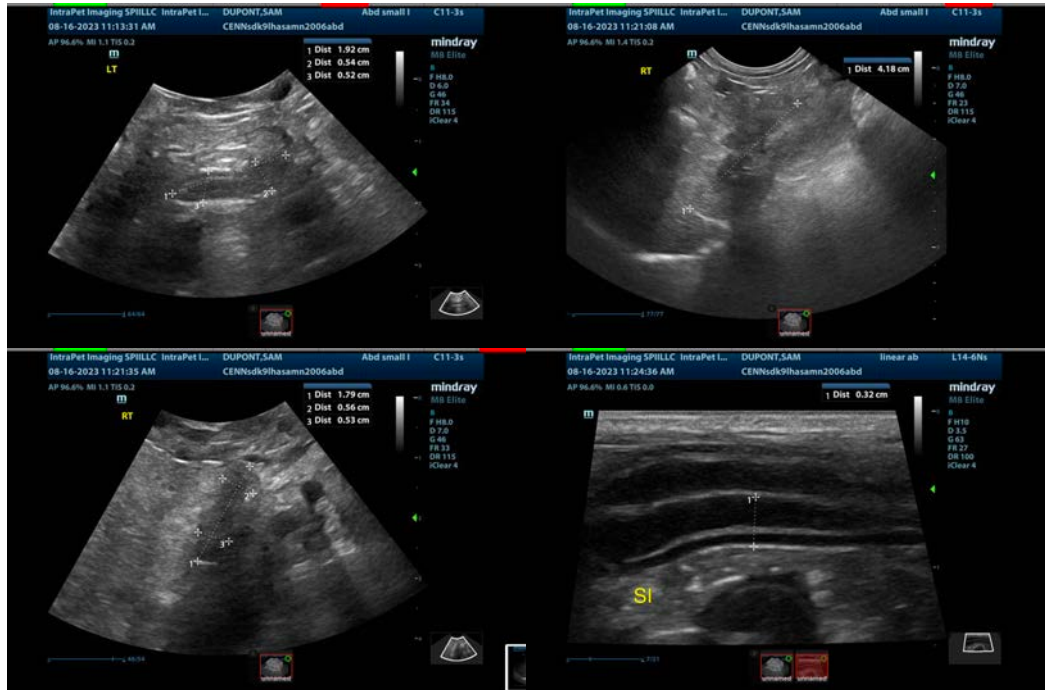
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large, solid, mixed echogenicity mass effect in the left cranial abdomen. This appears to be arising from an irregular left lobe of the liver. A portion of this mass effect extends caudal to the stomach, creating some concern that there could be an association with part of this lesion or the lesion itself with the spleen, although a direct attachment cannot be visualized. Primary differential is a hepatic mass lesion, much less likely a splenic mass. Consider a contrast CT scan to better evaluate the mass lesion for possible surgical removal and to confirm its origin. Additionally, consider a fine needle aspirate of the mass for cytologic evaluation.

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





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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