

**DATE PRESENTING CLINICAL SIGNS**

1/26/23 CC- 1/26/23 =presented for Wellness exam, O just noticed this am that harness a little loose, P stil E/D, seemed normal self at home. PE-B&A, mm pale, sl tacky; no petechiae; chest, jhheart WNL; mild distended abdomen

PATIENT

Cleo Kulczynski

Current Medications: Carprofen 75mg BID, Apoquel 16mg tablets- 1 SID, Sentinel- Monthly

Lab Results: PCV- 22%, Platelets low, Retic- mod response

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Sedation: Not required to complete full diagnostic ultrasound.

Canine

Stat Report: Approved/Requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

BREED

Labrador

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

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.

AGE

10/6/12

The left kidney has a normal shape and size (6.87 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

80.4 Pounds

The right kidney has a normal shape and size (7.53 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BYBeth Johnson, DVM
DACVIM**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.94 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.

HOSPITAL NAME

Essex Middle River VC

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

REFERRING VET

Dr. Hicks

Spleen

The spleen is borderline small and irregular. The spleen echotexture is heterogenous and mottled, the splenic capsule is irregular and nodular. The blood flow through the hilus and splenic parenchyma appears normal.

INVOICE

44519

The splenic parenchyma is diffusely irregular with too numerous to count, ill-defined, bulging nodules. Additionally, there is a very ill-defined irregular hypoechoic region towards the head of the spleen measuring 3.25 cm x 2.77 cm. No focal cavitated mass lesion is observed.

Liver

The liver is severely irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. Similar to the splenic parenchyma, the hepatic parenchyma is diffusely irregular and has too numerous to count ill-defined mixed echogenic nodules, which are not distinct, but which do appear to deform the margins of the liver somewhat.

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 pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a large amount of mildly echogenic free fluid. No lymphadenopathy. The omentum is diffusely mildly hyperechoic and slightly irregular.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

PRIMARY FINDINGS

- Diffusely irregular/nodular spleen with a possible ill-defined mass effect towards the head
- Diffusely irregular, nodular, and 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.
- Large volume free abdominal fluid-pcv 20%

SECONDARY FINDINGS

- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

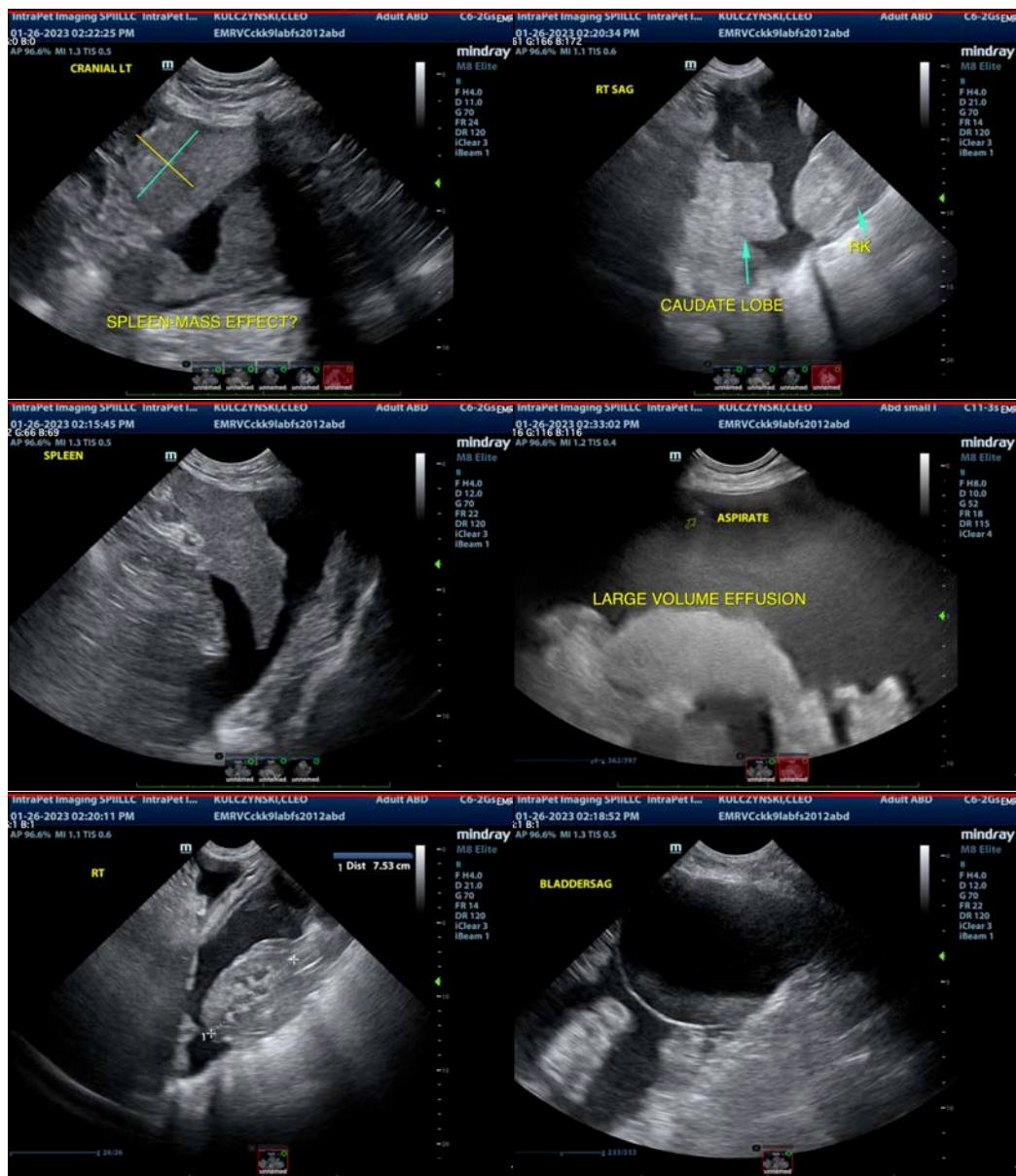
This case is suspicious for a hemoabdomen but somewhat atypical.

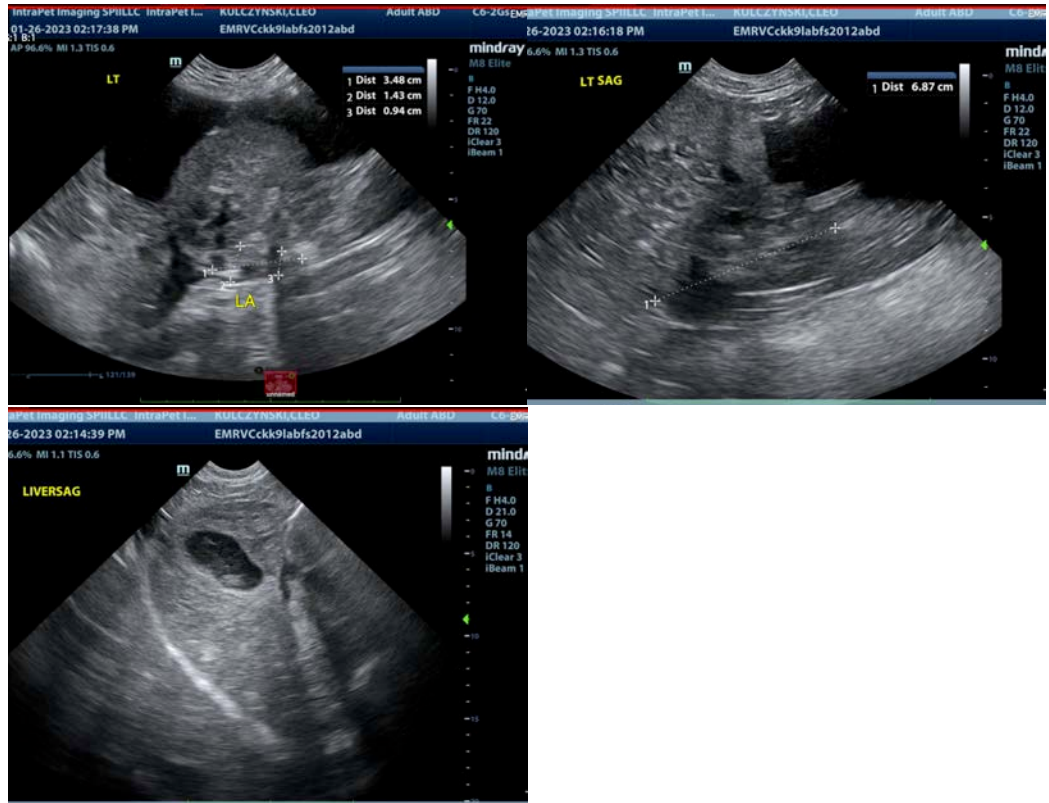
There is no evidence of a focal large cavitated mass lesion to attribute to the fluid in the abdomen.

Additionally, the fluid has relatively low packed cell volume for a typical hemoabdomen. There is the possibility that there is a splenic nodule (particularly the irregular area towards the head of the spleen) that

has ruptured and collapsed, making it difficult to identify, or that there is a liver nodule that is bleeding and not readily evident, but there is also the possibility that this is a modified transudate with some red blood cells and not an overt hemoabdomen (hemorrhagic effusion?).

Consider coagulation screening and ideally a contrast CT scan of the abdomen to evaluate the liver and spleen with higher resolution, looking for a collapsed, ruptured mass lesion, etc. Otherwise, if clinical suspicion is very high for a hemoabdomen (no blood contamination, etc.), and 3-view thoracic radiographs are clear, you could consider exploratory, and if no focal lesion is identified, obtain biopsies (of liver and spleen) +/- splenectomy.





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