**DATE PRESENTING CLINICAL SIGNS**

4/11/23

Referral for Continued Care. Mass/Swelling – Spleen.

PATIENT

Gibby Kahl

History: Date: 04-11-2023 Notes: Referral for abdominal mass. Baseline BW at RDVM Abd and chest rads
 CBC: RBC: 4.33 (5.39 - 8.7) HCT: 27.6 (38.3 - 56.5) Hemoglobin: 9.3 (13.4 - 20.7) MCH: 21.5 (21.9 - 26.1)
 Reticulocyte hemoglobin: 22.9 (24.5 - 31.8) Lymphocytes: 1.03 (1.06 - 4.95) Chemistry: Albumin: 2.6 (2.7 - 3.9) ALP: 197 (5 - 160) Amylase: 1,791 (337 - 1,469) UA: 3+ protein, rare rods T4: 0.6 (1 - 4)

SPECIES

Assessment: Abdominal Mass

Canine

Lab Results: Pending.

BREED

Labrador

Date of Previous IntraPet Ultrasound: No previous.

SEX

Male, neutered

Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: STAT requested.

Imaging Performed By: Rachel Brillhart, RDMS.

AGE

2011

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is mildly distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

WEIGHT

84.2 lbs.

The prostate is normal in size (1.23 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

INTERPRETED BY

Andrea Nicastro, DVM,
 Diplomate ACVIM
 (Small Animal Internal
 Medicine)

The left kidney is normal in size (7.37 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

HOSPITAL NAME

Animal Emergency
 Hospital

The right kidney is normal size (6.95 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

REFERRING VET

Dr. Ruby

Adrenal Glands

The left adrenal gland is borderline enlarged (0.94 cm at cranial pole) (0.85 cm at caudal pole) (2.75 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

14797

The right adrenal gland is normal size (0.88 cm at cranial pole) (0.74 cm at caudal pole) (2.87 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is severely enlarged with irregular peripheral contours and a >21 cm heterogeneous mass effect throughout the organ. Areas of cavitation are observed within the mass. There is no visibly normal appearing

splenic parenchyma. Splenic vasculature appears normal with no obvious evidence of thrombosis. The mesentery adjacent to the spleen is mildly hyperechoic.

Liver

The liver is subjectively normal in size with slightly irregular peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely mottled and heterogeneous with a nodular pattern throughout the organ. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate to large amount of aggregated echogenic partially dependent to suspended sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

A 2.73 cm irregular hypoechoic mass is observed in the caudal abdomen, at the level of the bladder apex. Surrounding mesentery is hyperechoic. In addition, a few varying sized hypoechoic nodules/masses are observed in the left cranial quadrant, the largest measuring 3.00 cm in diameter. Surrounding mesentery is hyperechoic. Trace free fluid is observed.

Lymph Nodes

See *Free Abdomen*.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

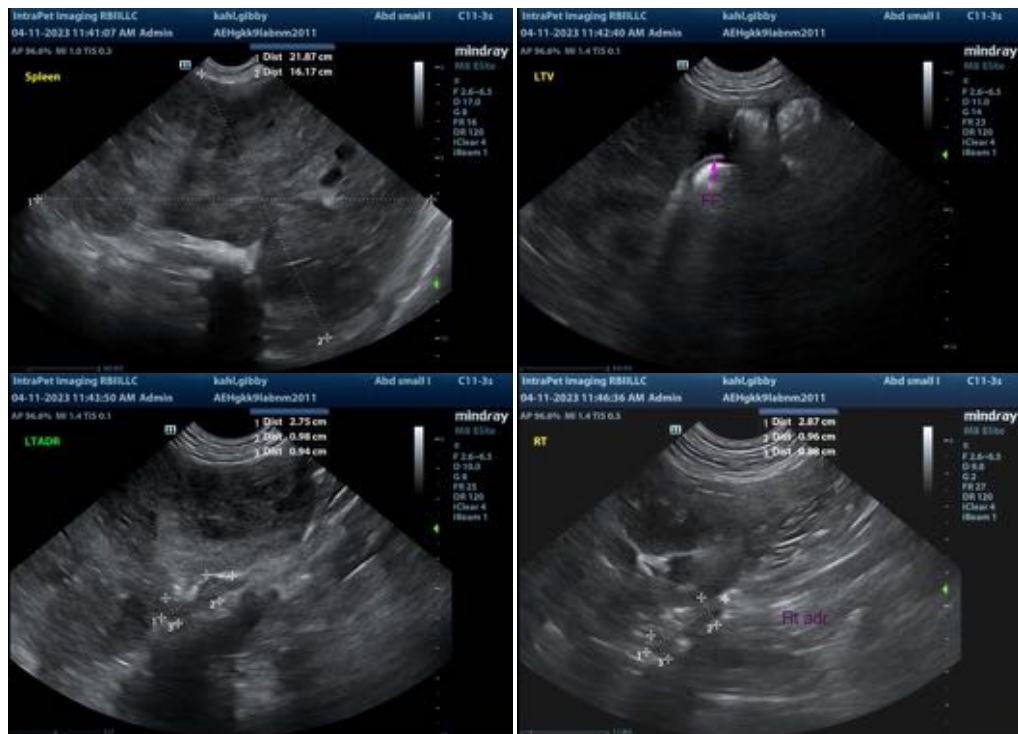
- Large splenic mass effect. Neoplasia (i.e., round cell tumor, sarcoma, other) is suspected with a low possibility of a benign process. Regional peritonitis is present.
- The hepatic parenchymal changes are concerning for metastatic disease. However, other hepatopathies (i.e., inflammatory disease, hepatotoxicosis (i.e., copper), fibrosis, other) should also be considered.
- The origin of the nodules in the left cranial quadrant and in the caudal abdomen are unclear. They are suspected to be arising from mesentery (i.e., metastatic disease) although enlarged lymph nodes cannot be excluded.

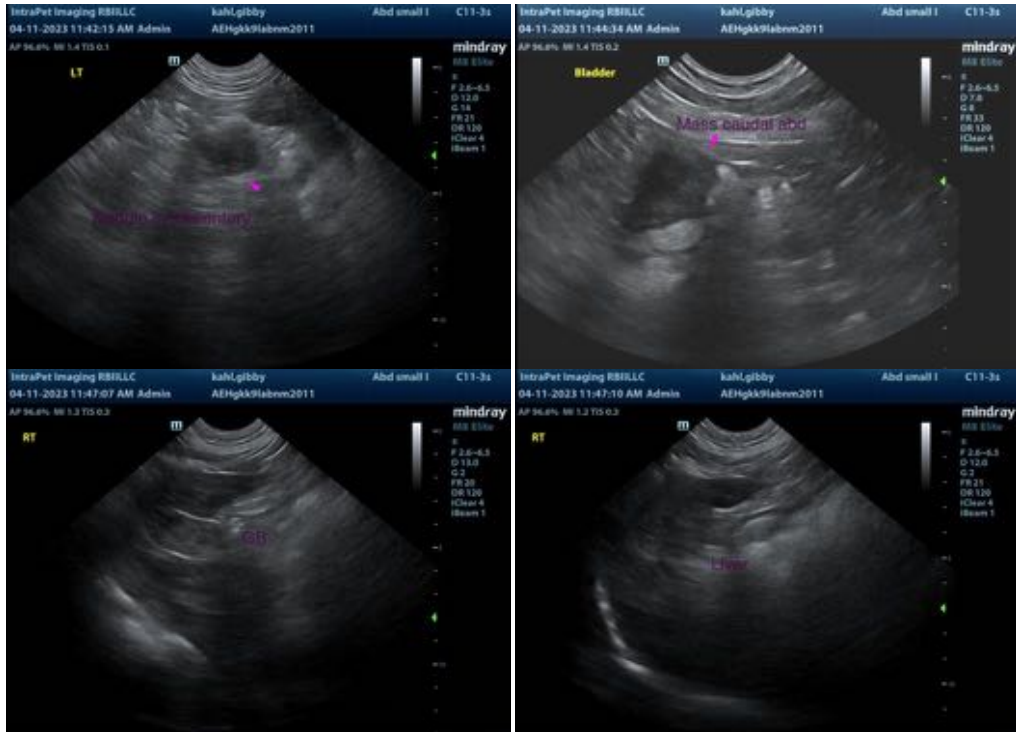
Secondary Findings:

- Mild, bilateral chronic renal changes with dystrophic mineralization.
- The gallbladder sludge may be secondary to fasting, cholestasis, or an emerging mucocele.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- A fine needle aspirate of the splenic mass can be considered if clotting status is appropriate. A 25-gauge needle should be used. There is some risk of iatrogenic hemorrhage with the procedure. Therefore, if aspiration is pursued, the patient should be monitored sonographically for at least 5-10 minutes post procedure to assess for bleeding.
- If an aggressive approach is desired, consider an abdominal exploratory with splenectomy and assessment of the rest of the abdomen for metastatic disease. An abdominal CT scan would be useful in pre-surgical planning. However, given the guarded prognosis for this patient, consider palliative care in lieu of aggressive diagnostics/treatments.





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.

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