**DATE PRESENTING CLINICAL SIGNS**

4/20/2022

PATIENT

Hiistory: Decreased appetite. On/off vomiting and diarrhea for years, no weight loss, no melena or blood in stool per owner, history of OA (on chronic NSAIDS). New bloodwork changes: elevated ALT, decreased rbc parameters (HCT wnl but decreasing over the years).

Booker Smith

SPECIES

Current Medications: Carpaquin BID (75 mg) (will be decreasing dose in future) recommended d/c for now, start omeprazole 20 mg PO BID, start gabapentin, restart dasuquin

Canine

Lab Results: ALT 260 (18-121), HGB 13.3 (13.4-20.7), HCT 41.1% (38.3-56.5), MCV 57 (59-76), MCHC 32.4 (32.6-39.2), Retic Cnt 0.9%, ABS RET 65 (10-110), RETIC HGB 17.9 (24.5-31.8).

BREED

Urine Specific Gravity 1.039. Normal UPC. Inactive sediment.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.

Labrador Mix

SEX

Imaging Performed By: Andi Parkinson, RDMS.

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE****Urinary System**

8/9/2010

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. The region of the trigone is normal.

WEIGHT

64.8 lbs

The prostate is not definitively visualized due to its pelvic location.

INTERPRETED BY

The left kidney is normal in size (7.17 cm in length); with a slightly irregular shape. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. The cortex is mildly heterogenous in appearance. A 2.47 x 2.02 cm round, hypoechoic to slightly heterogenous, vascular mass is observed at the caudomedial aspect. The lesion causes mild capsular expansion. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia or hydroureter.

Andrea Nicastro, DMV,
 Diplomate DACVIM
 (Small Animal
 Internal Medicine)

HOSPITAL NAME

Frederick Road
 Veterinary Hospital

The right kidney presented normal in size (7.54 cm in length); with a normal shape and smooth peripheral contours. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. The cortex is mildly heterogenous in appearance. Hyperechoic shadowing diverticular foci are visualized. A 0.91 x 0.81 cm heterogenous, slightly cystic nodule is observed at the caudal pole. A small cortical cyst is observed at the lateral aspect. There is no evidence of pyelectasia or hydroureter.

REFERRING VET

Dr. Beyer

Adrenal Glands

The left adrenal gland is normal in size (0.75 cm at cranial pole) (0.58 cm at caudal pole) (3.31 cm in length); with a normal shape and smooth peripheral contours. There are a few ill-defined heterogenous areas at the cranial and caudal aspects. The remaining glandular echogenicity and detail are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

10778

The right adrenal gland is normal size (0.52 cm at cranial pole) (0.51 cm at caudal pole) (2.41 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 normal in size (2.29 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate to large amount of aggregated, echogenic debris/sludge is observed within the lumen, most of which is gravity dependent and some of which is suspended. The cystic and common bile ducts are normal.

Gastrointestinal

The gastric lumen is not distended. The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pyloric antrum, the muscularis layer is prominent. The pyloric outflow tract is patent. The small intestinal lumen is segmentally dilated with gas and 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. No obstructive or overt infiltrative disease is noted.

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

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Left renal mass. Neoplasia (i.e., adenocarcinoma, lymphoma) is considered likely. However, a granuloma or inflammatory focus cannot be completely excluded. The right renal nodule could be consistent with a complex cyst, a metastatic lesion, granuloma or inflammatory focus. There are bilateral age-related renal changes with dystrophic mineralization

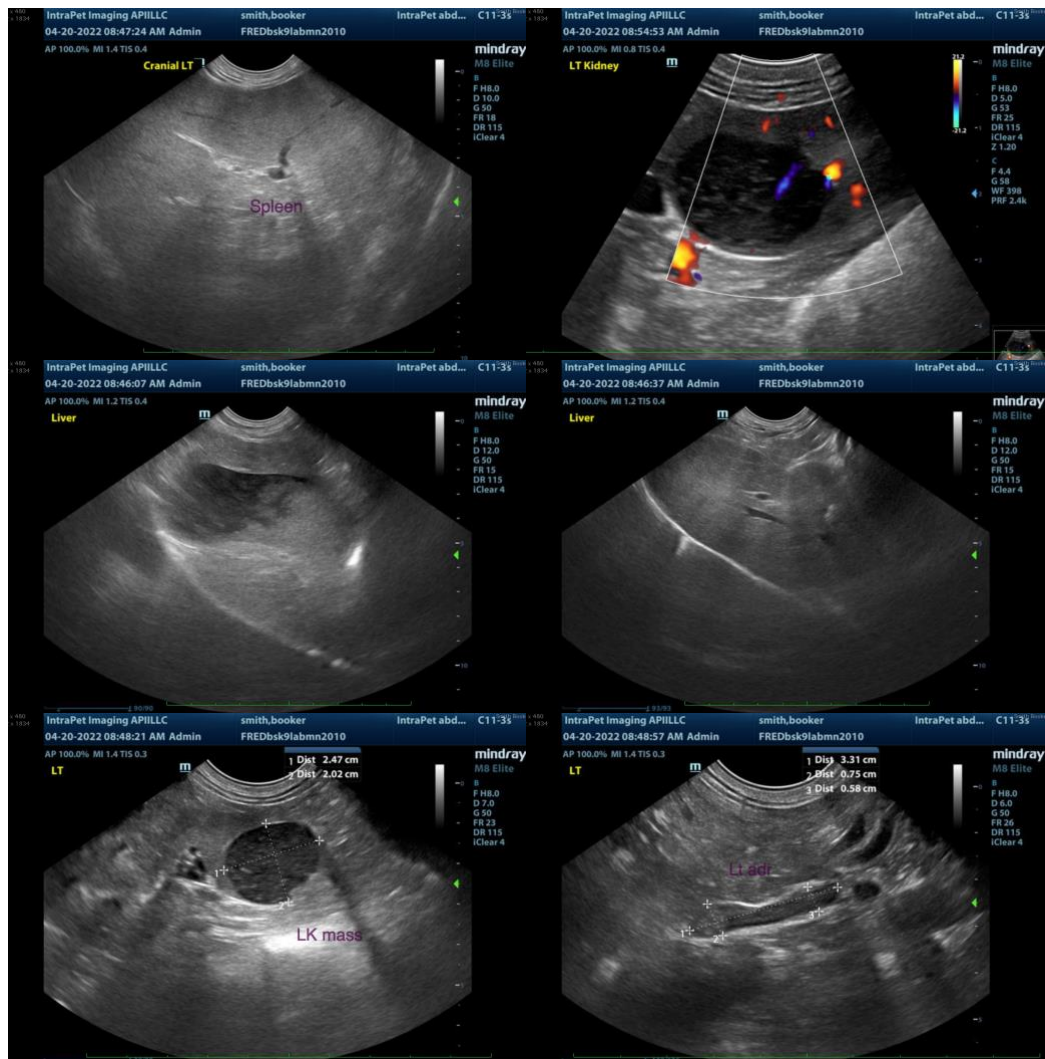
Secondary Findings

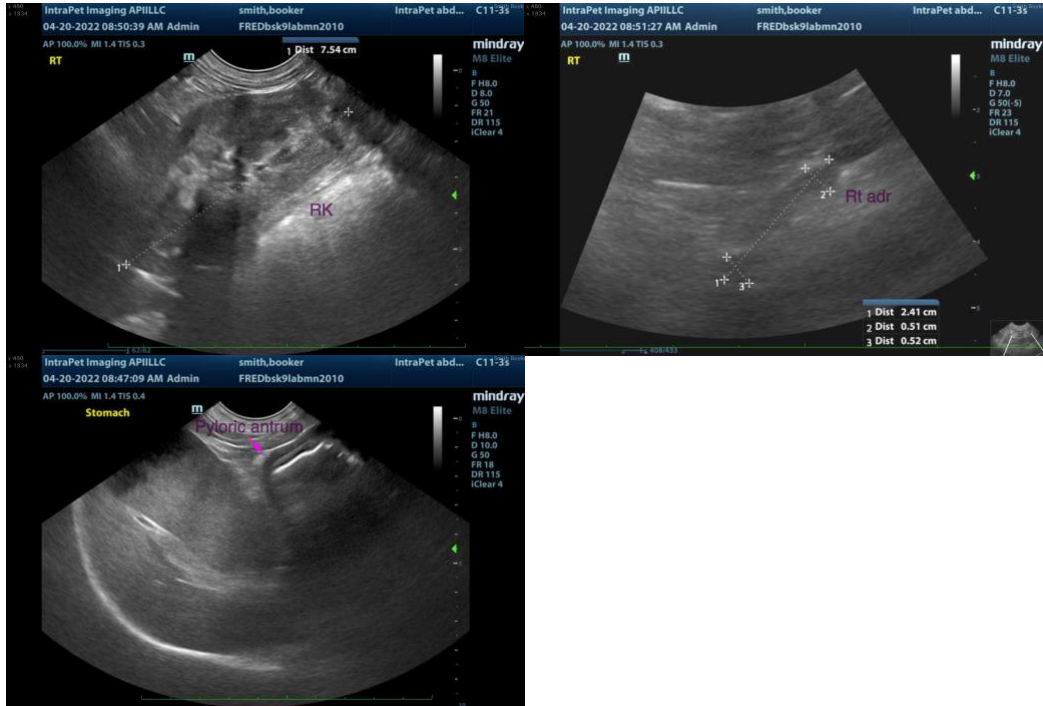
- Gall bladder debris/sludge, non-mucocele
- The pyloric antral wall changes could be consistent with hypertrophy, inflammatory, of less likely, emerging neoplasia.
- The left adrenal parenchymal changes are most consistent with hyperplastic change with a lower possibility of emerging neoplasia.
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis,

copper-associated hepatotoxicity, reactive hepatopathy, infiltrative neoplasia (less likely)) cannot be excluded.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- A fine-needle aspirate of the left renal mass is recommended (if clotting status and blood pressure are normal). A 25-gauge needle should be used, and the lesion should be closely monitored following the procedure for evidence of iatrogenic hemorrhage. If cytology results are inconclusive, a surgical biopsy may be necessary to get a definitive diagnosis. If surgery is pursued, hepatic and GI biopsies should also be obtained, given the patient's clinical history.
- Other diagnostic considerations include a GI panel (send to Texas A&M) +/- pre-and postprandial serum bile acids.





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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